I'D LIVE IT AGAIN



THE AUTHOR IN 1912

I'D LIVE IT AGAIN

by Lieut.-Col.
E. J. O'MEARA
Ind. Med. Service (rtd.)



JONATHAN CAPE
THIRTY BEDFORD SQUARE
LONDON

FIRST PUBLISHED 1935

JONATHAN CAPE LTD. 30 BEDFORD SQUARE, LONDON
AND 91 WELLINGTON STREET WEST, TORONTO

3180

PRINTED IN GREAT BRITAIN IN THE CITY OF OXFORD
AT THE ALDEN PRESS
PAPER MADE BY JOHN DICKINSON & CO., LTD.
BOUND BY A. W. BAIN & CO., LTD.

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CHAPTER I

LOOKING FORWARD

I HAVE recorded the following episodes in my Indian career at the repeated suggestion of many of my patients who have been kind enough to listen to an Irishman's yarns. My boyhood was devoid of incident, and I will therefore begin when I went from my public school at Sherborne to Guy's Hospital in October, 1892.

It was not originally intended that I should go in for medicine, although there were several members of the profession in my family, including Barry O'Meara, Napoleon's doctor, the author of *A Voice from St. Helena* or *Napoleon in Exile*, an indictment of the treatment of that great man by Sir Hudson Lowe, the Governor. The decision was largely due to Sir Alfred Lethbridge of the Indian Medical Service, who acted as my guardian after my father's death in 1888. Once I had begun my medical course I looked forward to the possibility of passing into the Indian Medical Service and all that a career in India held out.

Of all my hospital experiences, none was more trying than the dissecting-room. It overwhelmed me with horror and dismay. Outside, thick London fog covered everything with its dreary yellow pall. Inside the long bare room, with its cold slate walls and not over-clean cement floor, the bad lighting threw weird shadows on the rows of bodies on their narrow tables. The atmosphere

was beyond description. Of the mixture of smells, the only two that could be said to be pleasing were disinfectants and tobacco-smoke. They certainly were a relief. My thoughts rushed back to beautiful Devonshire lanes and sun-kissed meadows and the playing fields at Sherborne. What an awful contrast! To think that at least three years of this lay ahead! For such is the minimum time of those who aspire to the Fellowship of the Royal College of Surgeons. One of the demonstrators of anatomy (a subsequent friend of mine, who was to be twenty years a demonstrator before being promoted to the junior staff of the hospital) sent me to a table and gave me an arm to dissect.

I picked up my scalpel and cut human skin. What is that awful churning feeling at the pit of my stomach? Steady, man! You are not going to make an exhibition of yourself before all the other students.

I recovered sufficiently to make a long incision down the front of an emaciated forearm. Whose forearm? Whose body am I dissecting for the benefit of a coming generation? I judged that it was the limb of some poor old charwoman who earned a miserable existence by scrubbing out the dingy offices of the Borough.

I turned back the poor withered skin with my knife and exposed the muscles beneath, helped by words of instruction and encouragement from the kindly demonstrator looking over my shoulder who evidently sensed my physical and mental strain.

By the end of the afternoon the whole front of the forearm had been exposed, and I had passed a test on the veins and first layer of muscles thereby revealed. Now I

was free to go. What an unspeakable relief the outside atmosphere, even that of a dense London fog! Oh! how I wanted some tea, but could I face a meal with that inexplicable odour clinging to my hands which repeated washings had failed to remove?

The study of anatomy is a heavier strain than many students can stand. I stuck to it for several days, and then, feeling it past endurance, I dashed back one afternoon to my room and sent a pleading S O S home that I might be allowed to give up medicine and take to law. The reply was sympathetic in tone but a firm negative, and I braced myself for the next ordeal: an operation. My head swam, but I endured it without fainting. In this I was more fortunate than one of my fellow students who fell from the top of the tiers of seats on to one of the assisting nurses in the theatre-well, with devastating effect.

I became gradually reconciled to the work, at the same time growing interested in the people of the Borough, the appalling conditions under which many of them lived, and their brave struggles and their never-failing kindness to those whose lot was even worse than their own. Some of these people were so poor that they could not afford fuel in the bitter cold of winter, and had to pay a farthing to a man with a brazier for boiling their kettle.

Life in the Borough was full of stirring events. While there were no motor accidents in those days, there were countless injuries from industrial machinery which was not so well protected at that period as it is now. One saw such sights as an arm almost wrenched off from being caught between pulley and belt, and a woman scalped from having her hair caught in rapidly rotating cogwheels.

Few Londoners, I fancy, have any notion of the toll of lives that was taken in building the Tower Bridge. One day alone there were three fractured spines.

On going up to a stretcher in the hospital one day to attend to an accident from a certain factory in the vicinity of the Tower Bridge, I casually said, 'What! Another case from ——!' mentioning the name of a firm notorious for the number of accidents happening to the workers. No one said anything at the time, but next day I was visited by a lawyer who threatened me with all the dire penalties of the law for my 'slanderous' exclamation, but I stuck to my guns and said that in my experience in the casualty department there was a remarkably large number of cases from the works in question. The lawyer and a representative of the firm stormed, but from that time onwards there was certainly a considerable decrease in their casualty list.

Saturday nights in the Borough were always exciting and the police were kept busy bringing in every variety of case. One night I spent over an hour removing pieces of a flower pot and soil from under a man's scalp. His wife, objecting to his late nights, had waited for his home-coming with a large flowerpot at a window immediately above the front door. On her spouse's arrival at the top of the steps — Bang! The missile went down with unerring aim. Fortunately both for her and for him the heavy blow did not fracture the skull.

Certain parts of the locality round the Borough had a particularly bad name, one in particular, Grotto Grove. No policeman was allowed to enter this misnamed region

alone, and when I came up it at night I was often asked by the two constables at the top if all was quiet. One night a different experience was in store for me. Coming up the Grove with a student named Onraet (who was afterwards killed in the Boer War at the attack on Pieter's Hill, being shot through both carotid arteries), we were hustled and attacked by seven or eight men. I had nothing of value on me but they took Onraet's watch. Next morning, when we were having breakfast in the College dining hall, the porter came up and said that two men wished to speak to us. We went down to find two navvy-like men nervously fingering their caps. 'Beg pardon, sir!' one of them said, 'We're very sorry, we didn't know last night that you came from the hospital, and we have brought back the watch!'

At this time I frequently attended the out-patients of Mr. (now Sir) Arbuthnot Lane. His methods were novel in a very conservative atmosphere, and caused much comment and criticism, but Sir Arbuthnot Lane was too sure of the soundness of his theories — especially as to the treatment of fractures — to be shaken.

Later in the curriculum it was necessary for me to attend a certain number of midwifery cases before the final qualifying examination. This was most trying work. Every night that I was first 'on call' after midnight four babies on an average were brought into the world by me before 8 a.m. This meant tramping miles from one house to another along badly-lit side streets, often in cold rain and sleet carrying a heavy bag, my destination in the majority of cases an indescribable hovel. But there were notable exceptions and in some instances a haven of spot-

less cleanliness was found amid the most unpromising surroundings. I remember one clean little room where I was nearly suffocated with ammonia vapour from a stable directly below.

On another occasion I was called to the home of a woman whose profession has been described as the oldest in the world. The room was spotless. Baby clothes had been carefully made for the event. She was very devout and attended church regularly. In fact, with the one exception, she was a regularly-living, God-fearing woman. Was she to be branded with the degradation attached to her class, when she had been forced into this means of earning her living by circumstances beyond her control?

About two o'clock one morning I was called to a house in the slum known as Grotto Grove mentioned before. The woman who came to fetch and pilot me to the house was evidently much the worse for drink. We eventually arrived at a dilapidated house and my companion stumbled up the stairs to fall insensible in the room at the top. This room, which was not very large, contained two men, three other women and two children. With the exception of the children, who were sound asleep, all the occupants were very intoxicated. It was not difficult to make out the lady who was to add to her family under these terrible conditions. After about two hours the baby was born, I working single-handed, surrounded by the inanimate forms. It was then a problem what was to be done with the baby. I wrapped it up in an old flannel petticoat which I took off the mother and placed it in a corner with a chair in front, in case one of the prostrate forms should return to partial consciousness and roll on to the unfor-

tunate infant. I then hurried back to the hospital to send a nurse to deal as far as she was able with this appalling chaos.

Yet again I was called one afternoon to a tiny room in Bermondsey to attend a widow in her confinement. Her husband, a dock labourer, had met with a tragic death a few months previously, from an accident when unloading a grain ship, a kind of mishap of frequent occurrence in those days unfortunately. The bags were being hoisted in a sling, one slipped and dropped on the neck and shoulders of the man, driving his chin down against his breastbone, and fracturing his spine by the acute flexion, causing immediate and complete paralysis below the lesion, and subsequently a drawn-out suffering of three or four months before his merciful release.

This poor woman was making a living by sewing shirts — sweated labour. If I remember rightly, the amount was 1½d. per shirt, all hand-sewn! She had taken an infinite amount of trouble to prepare for her baby, making all the clothes, but it was evidently going to be a great struggle to feed two mouths.

I realized at once that it was a case of twins or triplets, but refrained from telling the unfortunate woman until after the first baby was born. When I told her that another was coming, her distress was pitiful. After the birth of the second child it was necessary to break the news that a third would arrive. It was heart-breaking to see her tragic anguish, and she kept wailing, 'How can I possibly support three children?' She had made elaborate preparations for one, as far as her tiny income would allow, and then to be presented with three! Fortunately

the children turned out to be strong and healthy, and I was able to get a friend of mine, a wealthy woman, to take an active interest in the case, by giving money and subsequently more lucrative employment.

The condition of the children in most cases was terrible. I went to see a sick baby. The occupants of the room were the infant and a precocious boy of about nine. 'What work does your father do?' ' 'E ain't 'ad a job for munse and munse [no dole in those days], but I 'ope 'e's done a click to-day.' 'What do you mean?' 'Wy, copped somethink, o' course. Nicked somethink.' 'But that's not right!' 'Straight people's fools. That's what father reckons. It's only the mugs wot git took! But I s'pose father'll be smugged someday, eh?'

The boy sat on an old box and quietly nursed the baby on his knee. Its wizened face was strangely old and piteously flea-bitten, its body small and emaciated. From time to time the boy chewed a fragment of dirty bread and then thrust it between the baby's blue lips. The mother now returned. 'Gimme the baby!' The half-dressed woman was listless and inert from semi-starvation. 'Baby's that backward — more than eleven months old,' she now said to me. 'I'm quite wore out with the never endin' trouble.' The infant was placed for my examination on the only other article of furniture in the room, a much-bent iron bedstead which required the help of the wall to keep it on its legs. The child's skin was hot and dry, the result of a high temperature, and the wheezing and rattling of the chest pointed to acute bronchitis, which examination proved to be so far advanced as to hold out little hope of recovery. This fact I broke as gently as

possible to the mother, who merely ejaculated 'O my Gawd!' The poor boy flung himself down on the bed by the side of his baby sister in the wildest outburst of tears, sobbing his heart out.

Talking of boys, a lad of the Borough employed as an errand boy in a small shop had saved up his money for a really wonderful day's holiday and decided on a trip to Margate and back by one of the pleasure steamers running from the London Bridge pier. In addition to his fare he apparently started the day, which was to have such a tragic end, with about four shillings. He expended two shillings on cakes and buns and a shilling on oranges, all of which he succeeded in consuming in the course of about two hours. On the top of this colossal meal, he made the fatal mistake of drinking four bottles of ginger ale. How he accomplished such a feat it is difficult to understand, but somehow it was gulped down and almost immediately he was taken seriously ill with acute abdominal pains and severe collapse. When brought into hospital, the case was beyond all hope and the poor lad died in a few minutes. My diagnosis was acute dilatation of the stomach caused by the swelling of the new buns from the ginger ale, and a post-mortem revealed that organ enormously distended.

One afternoon in the casualty department a child was carried in. What was the matter with this pretty little girl? She was obviously very ill with a high temperature. One glance at her face — her upper lip was covered with a hideous black scab. No mistaking this disease, we unfortunately saw so much of in those days, but how in the world could she have caught the infection? Previously

The effect was immediate and from that moment we were on the most friendly terms.

During this same examination I was asked a question to which I offered a sensational and probably unique reply. I had been invalided home with an abscess in my liver, the result of dysentery, which had ruptured into and was discharging through my lung, and I actually came out of a nursing home for the examination. The question asked by the examiner was as to the nature and appearance of pus from the liver: 'Have you ever seen liver pus?' Had I! I had been bringing it up for close on two years. The humour of the situation was too much for me. I began to laugh, coughed, and my mouth was full of liver pus. The look of bewilderment and surprise on my examiner's face was beyond description.

In no circumstances is bullying so contemptible and impatience so misplaced as when examining. So much can be done to help a really good candidate over the stile at a critical juncture. When I myself was examining for the Allahabad University in 1914 to 1920, men have come up to me paralysed with fear, whom, I felt, knew their work through and through. On these occasions I would give a friendly pat on the back, and say, 'Sit over there for ten minutes and think things over.' Nearly always the candidates came back to pass with flying colours.

Once when examining I quaintly misjudged a European candidate. I had noticed that he repeatedly took what appeared to be notes from his pocket and after a hurried glance immediately proceeded to write violently. I called up a bull-dog (to use the recognized term) and

told him to work his way quietly behind the candidate and the next time he brought out his notes to bring him up to me. It was not long before he was standing in front of my desk, and I asked what he meant by looking at notes from his pocket. He stoutly denied the charge, and I told him that he had been seen to take notes from his pocket and each time he had commenced to write rapidly. He then produced — not notes, but a photograph of his best girl! As this form of stimulation did not transgress the examination rules I handed back the photo, feeling myself duly punished for my rash judgment, and expressed the hope that his sweetheart would be able to congratulate him on the result.

At various times examinees have handed in the following amusing papers. One candidate sent in a paper in answer to six questions with nothing on it except a beautifully drawn peacock! Another in answer to the first five questions wrote opposite 1, 2, 3, 4, 5, 'I don't know', and opposite No. 6, 'I don't care a damn'. While a third wrote a curse in Persian for which the university referred him back to his studies for a double period.

The majority of Indian students have remarkable memories, but are not always adepts in the practical application of their knowledge. Examining on one occasion in materia medica I was struck by the word for word replies that a candidate gave from that excellent but dry as dust book, mentioned before, Hale-White's, and I found that he could repeat whole pages without a mistake, but if stopped in his parrot-like repetition and asked simple direct questions such as the dose of strychnine or arsenic he was often completely at sea.

As regards the prospects of the Indian Medical Service at the time when I went in and now, the keen competition, like that of all the Indian services, has gone. In 1897, there were ninety-six of us striving for eighteen commissions, but some ten or twelve years later I believe the examiners reported to the Secretary of State for India that few of the small number of candidates who presented themselves came up to the required standard, and this paucity of European candidates continued for a number of years, but recently I have been told that the pendulum has begun to swing the other way.

I am strongly of the opinion that excellent work can always be done in India, that probably no other country offers such a variety, scope and interest, with unlimited fields for research; and if I could begin my medical career over again I should certainly go to India with all its opportunities to learn in every branch of medicine and surgery under conditions that give unique opportunities for all-round knowledge.

CHAPTER II

FIRST IMPRESSIONS OF INDIA
1898-1904

§ 1

SPLASH! And a loud rattling of ancher-chains disturbs the lazy humid air, and we are at anchor in Bombay harbour. A breathless haze blots out everything save the ghostly shadows of other ships lapped by the colourless water, but away to starboard a rosy tint, growing every minute more intense, throws into relief the emerging coastline of India. Later, as the launch bears us swiftly to the shore, we glance back at the great white vessel with its tier upon tier of burnished yellow portholes blinking at the rising sun. How wonderfully graceful that line of hull! A symbol of power, too, and the link that connects us with our native land, so that we have a feeling of appreciation and sadness at this moment of good-bye.

The first sight of India is amazing, intoxicating, bewildering, stupefying. You have strayed suddenly into a new world unlike anything known to you before in its whirl of complexity and infinite variety. The play and wealth of colour. The crowds of strange faces, the babble of unknown tongues, the new religions, new clothes, new food, new everything. Even the flora and fauna are all different, new trees, shrubs and flowers, new animals and

birds. After a time things begin gradually to sift and sort themselves, and you awake from this elaborately staged dream with the smell of the East in your nostrils, that wonderful blend of spice and garlic, goats and dust.

The mass of incongruities unfolds itself. From the high-caste wealthy rajah in his elaborately gold-embroidered clothes, with ropes of priceless pearls, lounging in the latest Rolls, to the untouchable thin-legged sweeper in his single cotton garment diligently sweeping the street. The great public buildings resplendent with cool colonnades, towering cupolas and pinnacles, side by side with the most miserable insanitary huts with walls of filthy matting and roofs thatched with leaves.

Gradually rousing from this dream, you are drawn into the whirlpool, and the call of the East begins. Much as you may grumble and try to resist, it grips you. Few can resist its fascination. . . .

Three days and three nights in the train. Where is this legendary region of palms towering above thick masses of undergrowth amidst steaming, suffocating heat? I have been travelling through sandy plains covered with patches of coarse grass and scanty scrubby trees, to the plains of the Punjab, a vast ocean of wheat, wave after wave rippling across its limitless fields as far as the eye can see. 'Tropical' India! I have been awake half the night with the intense penetrating cold, and my fumbling bloodless fingers can hardly button my clothes as the brakes grate and the train draws up at the long broad platform of Rawalpindi.

I drive to an hotel. Now we pass through a corner of

the bazaar. How truly Eastern! The mean houses are packed tight together, just square naked wooden frames covered with baked mud, relieved with neither paint nor carving, raised three feet above the street, and with the foulest smelling drain along their front. Just places for trade and shelter. Here a metal worker beats sheet metal into a graceful bowl; within a yard or two, a silk merchant unrolls his bales of rich wares. On the other side is a shop piled high with every kind of grain emitting pungent spicy odours. How even the smallest detail absorbs and interests a newcomer to such a scene!

Some two or three years later I was to have an exciting time one night in this bazaar. The rank and file of a famous fighting regiment, the 40th Pathans, recruited entirely from the wild trans-border tribesmen, had been chafing under the dull routine of drill and barrack life. At last they could restrain their inborn love of combat and loot no longer and broke away from all control, sacking this quarter, an incident which gave them the nickname of 'The Forty Thieves'. There were some hours of scuffles and hand-to-hand encounters before they could be again brought under discipline and marched back to barracks by their British officer. This and some other minor outbreaks led to the regiment being divided up for better restraint into four companies of Hindus and four companies of Pathans.

Now into the cantonment along broad white glaring roads, bordered with pleasant shady trees and well-kept grass. The roomy bungalows, standing well back, gave a sense of space and freedom, so different from the huddle of the Indian quarter. Here also is all the activity of the

West. Now we pass a company of Gordon Highlanders swinging along in their khaki uniforms to the swirl of their bagpipes. Next a battery of artillery rattles by, the horses' well-groomed, glossy coats reflecting the morning sun. Staff officers are busy in all directions, while orderlies gallop to and fro. Huge carts piled high with stores and munitions rumble along. The least excited creatures in all this busy scene are the mild-eyed bullocks so patiently drawing their great loads.

Having reported my arrival, and being told that orders would be issued as to my future duties next day, I was invited to attend the race meeting, the second of three days' flat-racing. At first it seemed to me rather incongruous that dozens of ladies in the latest fashions should appear so lighthearted and merry when their husbands were engaged in a life and death struggle on the frontier only a few miles away, with the possibility of the arrival at any moment of the paralysing telegram. But one quickly realized the spirit, which was later to be so generally and admirably shown by women in the Great War.

In the course of the afternoon, while in the paddock, a very pretty young bride was seized with acute abdominal pain. She died two days later from symptoms which I now know were due to appendicitis, a condition which was then almost unheard of but which a few years later was to come into such prominence with the dramatic illness of King Edward on June 24th, 1902, a few days before the date fixed for his coronation.

I was at Pindi, as we call the place in India, for about six weeks, attached to the 25th Punjab Infantry, and

there received orders to take medical charge of two companies of the 42nd Gurkhas and two mountain guns that were to escort a quantity of ammunition for the garrison and several lacs of rupees for the treasury at Gilgit. Then began that period of constant transfers which nearly always comes at the beginning of one's service in India. Within a year I was in eight stations, attached to thirteen regiments, and to a mountain battery, and had marched 800 miles, the greater part at night on account of the heat. I was nearly fourteen months in the country before I was sufficiently settled to get up my heavy baggage from Bombay and unpack!

§ 11

From Rawalpindi I marched to Abbotabad with a column and spent three months of the hot weather of 1898 in that delightful spot, with its hedges of rose bushes, its abundance of trees, and its good climate, so different from the usual frontier stations with their utter barrenness and arid heat. As in all frontier stations in these days there was one mess for the officers of all the regiments and units in the garrison, and here I had my first experience of some lively guest nights, including such novel entertainments as ram fights, scorpion versus tarantulas, cobra and mongoose combats. The Hon. Charlie Bruce, now a general, was then, as a captain in the 5th Gurkhas, a man of incredible strength and energy but to be avoided after dinner as he sometimes had a playful habit of showing his muscle by picking you up like a ball and then hurling you through

space. But he was always the best of friends. His fascinating books on the Himalayas and mountaineering have always been a keen pleasure to his many readers.

The ram fights gave one a headache to think of, these powerful animals dashing at one another with lowered heads from the ends of the arena at the top of their speed, to meet, forehead to forehead, with a crash in the centre.

Two subalterns made a bet that they would enter a small walled enclosure with a cobra, attack and kill it with no protection or weapon beyond their polo boots. Two good-sized cobras were found and the fight began. I must say I thought the encounter a risky one, but eventually both cobras were stamped on and killed, and in no case was there a fang mark within 1½ inches of the top of the boots. A cobra never rears more than a third of his length, and always strikes downwards, so the danger was small if the fangs did not penetrate the soft leather of the foot of the boot.

Cobra and mongoose fights were full of thrills, the careful manœuvring of the mongoose, his quickness to seize his opportunity, and his sudden rush in, almost invariably ended in a rapid victory for him.

The mongoose belongs to the ichneumon family, which is akin to our weasel. There are many species in Asia and Africa. They were sacred to the ancient Egyptians, probably for their usefulness in killing the asp. When imported into Jamaica they became a serious pest, just as the rabbit did in Australia.

Abbotabad was one of the permanent stations for Gurkha regiments and was the home of the two battalions

of the 5th Gurkhas. Gurkha troops are never stationed in the cantonments of the plains, as, being hill men, they would find the heat too great. As a result of having a fixed station, the officers had better-built bungalows and had more comforts than in the plains.

It was a relief to be able to sleep and eat without a punkah, and one's house could be left open all day, thus avoiding the dismal gloom which characterizes the hermetically closed bungalow of the plains. And how delightful to look out on the rose bushes in flower instead of on the baked, glaring, brown expanse round Pindi!

It was while I was with the 5th Gurkhas at Abbotabad that I had my first experience of rifle thieves. A trans-border tribesman will risk a great deal to become the proud possessor of a modern rifle, as he thereby acquires social status and becomes a pride to his family, having attained the means by which to carry on one of the eternal blood-feuds that prevail. A whole battalion were drilling on the parade ground, along one side of which ran a deep nullah or ravine. The men were being given a rest and arms had been piled near the edge of the ravine.

Suddenly five Pathans sprang out of the nullah, dashed to the nearest pile of rifles, seized seven or eight and jumped down into its cover. Instantly the bugles rang out the alarm, the 700 men ran to their arms, and immediately surrounded the ravine and scouted the country all round, but not a trace of the thieves or rifles was ever seen again.

The rifle thief, when attacking sentries, divests himself of everything except a loin cloth and his knife. He crawls along the ground in the dark like a snake, and if a

sentry is not very wideawake there will be a knife thrust in his back, and another British rifle will be over the border before daybreak.

Under such conditions sentries have to act instantly for their self-preservation, and woe betide the man or officer who approaches camp without due caution at night. One night I returned late to camp and had been careful to shout out 'Friend' quickly in answer to the little Gurkha sentry's 'Halth hugger ther?' but for the moment I forgot the sentry on the officers' tents. To his sudden and unexpected challenge I made a tardy reply, and a bayonet flashed at my chest. As I sprang back a friendly tent peg sent me sprawling on my back, this chance saving the situation, and teaching me to be more careful in future. The sentry was in no way to blame as instant action was the only way of safeguarding his own life.

A brother officer's life was once saved through his old-fashioned preference for a nightshirt over pyjamas. He was given to walking in his sleep and one night walked through the lines in this state. His white nightshirt, however, showed up so well that he was recognized and escorted back to safety. Had he been wearing dark pyjamas his somnambulant wandering would, most probably, have ended in tragedy.

On one occasion the quarter guard of a British regiment was surrounded by tribesmen and its two sentries were knifed without a sound. The Pathans then gained the roof and dropped through the skylight on to the sleeping soldiers in their beds. In the mêlée which ensued the thieves got away with a number of rifles.

So bad at one time did the knifing of sentries become

that the men were given short shot guns in place of rifles, which offered no temptation for theft.

When the regiment was on the march in the vicinity of the frontier, each man safeguarded his rifle or carbine from theft by digging a shallow trench over which he put his blanket and he slept on the top. Rifles were also protected by having the bolts removed, and by having a strong steel chain run through each trigger-guard.

One bright moonlight night when the regiment was encamped on the frontier and there had been frequent alarms of rifle thieves, I awoke with a start about 3 a.m. to see an object moving through my tent door which was fastened back.

We all slept with our revolvers inside our beds close by the right knee. I instantly fired through the bedclothes at the intruder, there was a Bah! followed by yells of mirth from outside. The subalterns of the regiment had pushed a sheep through my tent door, a somewhat risky practical joke, but it resulted in nothing more serious than mutton for lunch.

§ III

While with the 11th Bengal Lancers I had two orderlies, the first a Sikh, Dhulip Singh (Singh means Lion). He was a magnificent specimen of a man, standing about 5ft. 11in., with a broad, well-made chest and clean strong limbs. In accordance with the Sikh religion, his hair was uncut, and if let down would probably have reached to his waist, but there was no sign of it, rolled as it was into a

tight knot on the top of his head under his turban. The hair on his handsome face, moustache, whiskers and beard, was also neatly and tightly rolled. On his wrist was an iron bangle and in his hair a small iron tooth comb. The wearing of these things is another precept of the Sikh creed, the chief tenets of which are:

The Worship of one invisible God.
The Acceptance of one baptism.
Let 'Hail Teacher!' be thy watchword.
Of material things, reverence steel alone.
Be always prepared for war, and ready to die in the cause.

The Sikh religion shows a great advance on Hinduism in its freedom from idolatry, and in its endeavour to throw off the fetters of caste.

While Dhulip Singh was with me I had a severe polo accident, breaking several ribs and a collar-bone, and injuring my spine. This confined me to bed for several weeks; no women nurses were available in those days, and his devotion was beyond all praise. Except for about an hour, when away to take his food, he never left me day or night. He slept on a mat at the foot of my bed. There was nothing that he would not do for me — several of the things he so willingly did in nursing me were against the teachings of his religion.

When Dhulip Singh was promoted, my next orderly was a tall, wiry, well-built young Pathan, active and with fine features. He had the eye of a hawk. Like Kipling's young chief,



'JIM' AND MY FAITHFUL OLD BEARER

He trod the ling like a buck in spring
And stood like a lance at rest.

A good rider and keen horseman, he looked after my animals well, and helped in the training of my polo ponies. One morning he came up and asked for leave.

'Well! What do you want leave for?'

'I have to go across the border and shoot a man, Sahib.'

These men are constantly engaged in blood feuds, carried down from generation to generation. He returned at the end of fifteen days with a smiling face and, in reply to my question as to how he had got on, he said, 'Well, Sahib, I had to sit up four nights but I got him on the fifth.'

Sometimes a man who went on leave never returned to duty; then you knew that his foe had got in the first shot.

The tribesman keeps a look out for his intended victim from the tapering towers, forty feet high — which are a feature of transborder villages. He gains access to his tower by means of a twenty-foot ladder. This he pulls up after him and then sits quietly waiting for his enemy to appear in the open.

A curious characteristic of these border tribes is that during the seasons of ploughing and sowing all blood-feuds cease.

At the beginning of the ploughing season, according to an unwritten law, the tribesmen assemble in Jirgah (Parliament) and each man lays down a stone in front of him; as long as the stones are down, the feud is in abeyance.

To show the mentality of these tribesmen as regards fighting — I had charge shortly after the Tirah campaign of 1,200 Pathan reservists who had come down to India for their period of training. One day I asked them: 'Why did you fight against the Raj (British Government) when you were eating its salt?' 'Well, Sahib! The Sikhar (Government) never sent for us, if they had we should have come, but you could not expect us to stand by when a perfectly good fight was going on and not join in.'

It was interesting to see that here we had men belonging to races formerly hostile to each other now living amicably side by side in the same regiment and sharing the same feeling for the honour of the corps. Before the advent of British rule Sikh fought Mohammedan for the sovereignty of the Punjab for over 300 years. The torturing, sacking and massacres which went on during this period defy description. Fanaticism had full sway; when the Mohammedans had the upper hand they blew up the Temple of Granth (the Sikhs' Bible) and soaked its stones in the blood of the sacred cow. The Sikhs in their turn took Lahore, destroyed the mosques and deluged the foundations in the blood of contaminating swine.

All this old pent-up hatred had flared out again momentarily in September, 1897, at the tragedy of Saragarhi. This was a small outpost on the frontier held by nineteen men of the 36th Sikhs with two cooks. It was attacked by some 6,000 Pathans, and after all the nineteen fighting men had been killed or wounded the Pathans rushed the small fort and, having stripped and mutilated the bodies of the defenders, roasted the two cooks alive.

My bearer or personal servant and valet, Ram Lal,

was a Hindu from the Hardoi district of the United Provinces. He was to be with me for many years. He was the dearest old man, small of stature and build, with a pleasant face that was always in smiles above his trim white beard. He was absolutely reliable, patient to a degree, good tempered, tactful with all the other servants, and jealous of my interests. He and I were always the best of friends, more especially perhaps during the last eight years, as, when I first went to Agra in 1912, I was the means of saving his life. At the time I was living in the house attached to the Central Jail while my own was being re-roofed and generally reconstructed. The weather was most abnormally hot, and there had been five deaths from heat-stroke among the British community. Ram Lal was helping me dress for polo one afternoon about 5.30 when he suddenly complained of feeling unwell and asked to leave the room. As he had not returned by the time I had finished dressing, I went to see what was the matter, and found him lying quite unconscious on the veranda. I felt for his pulse, but one look was sufficient to tell me what was the matter — he was burning hot — heat-stroke! Not a moment was to be lost if his life was to be saved. I lifted him in my arms and carried him into the garden to a spot where there was a water-tank among some shady trees; other servants came to my assistance, and we laid him out on a strong string bedstead, covered with a wet sheet, while several men in turn fanned violently. Fortunately just then a coolie passed along the road carrying a large block of ice. This was commandeered, broken up, and packed around him, while I gently rubbed other pieces all over his body. His temperature in the armpit

was at first up to the maximum of the thermometer, 110° F. but under this treatment gradually came down until it was 103° at 9 p.m., but directly rubbing with the ice was stopped it rushed up again. Towards midnight, however, it came down to 102° and remained about that level. Then his heart began to fail and sitting up with him all night I found it necessary to give hypodermic injections at frequent intervals, but by 10 a.m. next morning he was much better and quite conscious, but completely out of his mind. This condition lasted for nearly a month, but then cleared up and he ultimately made a complete recovery.

§ IV

What a strange thing is memory! Looking back now on my first six years in India, I find some scenes and incidents imprinted on my mind most vividly, while of others I can recall next to nothing. . . .

In 1898 I was returning from Gilgit with a small column of troops. One afternoon we had camped on a high ridge in front of which there was an uninterrupted view from base to summit of that great mountain Nanga Parbat, 27,000 feet in height.

Above are the eternal snows, then the vast expanse of the Diamaraig glacier, remote and awe inspiring. Coming down to the level of vegetation, there are range on range of forest belts divided up by deep valleys. Surely one of the most impressive sights in the world with a climate ranging from tropical heat to arctic cold.

Suddenly about 4 p.m. an ominous noise brought us all out of our tents. To the north our ridge dropped into a deep valley, which rose to another ridge beyond and still another valley before sloping up the mountain side. The rumblings increased, then broke into a mighty roar. At the same time the hillside was seen to move, hesitate, quiver, then gather impetus, as rushing faster and faster it split into a mighty cataract which uprooted trees and cracked them like matches. Tearing, plunging, crunching, the enraged mass thundered into the valley below, filling it almost to the brim.

A thrilling and unique experience that one could enjoy, as this part of the country being entirely uninhabited there was no danger of the loss of life.

I have experienced many earthquake shocks but the most severe was that which devastated the Gurkha Station of Dharamsala. It occurred in the early morning and although I was 200 miles away it shook me violently in bed. At Mian Mir in 1902 a series of shocks took place in the middle of one night. Jumping out of bed, I pushed my wife out of the bungalow and darted for my little girl's room where she was sleeping with her English nurse. As so often happens on these occasions, the doors jammed and I was unable to open them. The shock had only half-awakened the nurse and I hammered on the door in a frenzy of fear. Asked afterwards as to why she did not make some effort to get out, the nurse replied that she thought the noise of the earthquake was a native wedding!

It is interesting the remarkable effect that earthquakes have in some people's mentality. On the night following

the shocks at Naples in July, 1930, many people would not sleep in their homes, but some of them exposed themselves to a far greater danger by sleeping on the parapet of a wall with a sheer drop on one side of a hundred feet into a ravine.

I passed through the Straits of Messina in a P. & O. boat not long after the earthquake which overwhelmed that town, but the only thing that was noticed from the ship was the great pall of dust which overhung the place. Seen afterwards, it was difficult to understand how the ruined colonnades and broken arches could be missed. Quick as I am to react to all other forms of danger it is always a matter of astonishment to me to realize that a shock has been going on for an appreciable number of seconds before I know what is the cause of the disturbance.

While in medical charge of the 11th Bengal Lancers I endeavoured to study all the conditions under which the men lived and worked, and I prevailed on the Colonel on several occasions to allow me to ride in the ranks, and one of the things which struck me most was at times the tremendous lateral pressure. A cavalry charge is surely one of the most thrilling experiences in the world. Every man, every horse, realizing that the order is coming, is keyed up to a tremulous expectancy, electrified through and through. The men are all eagerness and excitement, sitting well down in their saddles and taking an extra firm grip on their lances . . . How long shall we be kept like this? Suddenly, out blares the order, and we are away, with a mighty cheer from six hundred throats. The pace grows faster and faster, the horses stretching themselves to the utmost . . . Heavens! the pressure! Can I

possibly stay in the saddle? I must be lifted bodily out! The thundering of the hooves, the snorting, shouting, clanging and clattering of this living avalanche as it swoops down on its objective. . . Then, quite suddenly, the pressure relaxes. We spread out as a fan and scatter in pursuit. The thrill is over, but it was a thrill never to be forgotten.

It was my strange fate within a period of just over two years, 1899-1902, to be ordered three separate times on a particular duty which for one reason or another I was not to take up, in each case the officer who filled my place being killed.

On the first occasion, the regiment had been ordered to the frontier at Loralai. We started the long march of nearly three months from Mian Mir, but there was a famine in the country through which we went and it was impossible to feed the 600 odd horses, so eventually orders were given us to turn back and we were replaced by another cavalry regiment beyond the stricken area. The doctor of this regiment was Captain Dudley C. Johnston. A few days after his regiment arrived at Loralai, a fanatical Ghazi, or tribesman, waited for him to leave the hospital and shot him dead on its steps on the 9th January, 1901.

Next, I was ordered to China with the force which was sent to quell the Boxer revolution. I failed to pass the medical examination on account of a temporary attack of dysentery and my place was taken by Captain H. R. MacNee, who was killed at Shankaikwan.

In 1902 I received orders to proceed on active service

to Somaliland. My kit had been packed up and I went to the Colonel's office to say good-bye, when he handed me a telegram just received from Simla to the effect that a lieutenant must go and not a captain — I had only been a captain a short time. The Colonel said, 'I am very sorry to disappoint you, but Sime must take your place.' Poor Sime accordingly went to Somaliland where he joined a small column which was surrounded at Gumburru and killed to a man.

§ v

In May, 1902, I went to Mirzapur.

The city of Mirzapur, which is about half-way between Benares and Allahabad, has a population of about 80,000. It extends for over a mile along the south bank of the Ganges. There are many richly carved temples and fine bathing ghats along the river front. Mirzapur is famous the world over for its carpets, but these are not actually made in the town itself, but in the surrounding villages. It is also a centre for the shellac trade, the raw material for which used to come from the forests of the Central Provinces, but in Mirzapur resided the expert drawers, men who seized the hot sheets with their fingers, toes, and teeth, and drew them out in front of a hot fire to a degree of extreme thinness. The process of manufacture as regards the extraction of the shellac and separation of the dye was very wasteful, and in 1904 Dr. Gilbert Fowler and I patented a process for extraction with alcohol.

Lac, a kind of rosin, is deposited by an insect on certain

trees. The insect's ovary contains an intense purple colour much used in India before the advent of aniline dyes. Shellac, the manufactured article, is extensively used in the making of hats, electrical instruments, and for insulation.

The difficulty of inspection in a huge district like Mirzapur was often considerable.

Fifty miles to the south of Chopan at a place named Dudhi was a small hospital which I had to visit once a year. Between the two places there is an unbroken stretch of jungle until within a couple of miles of Dudhi, the only habitation in this fifty miles being a police post about midway. For reasons I was never able to fathom, this jungle was always infested with man-eating tigers, and it was much feared by the few Indians who dared to travel through it.

The only way by which this hospital could be reached in the short time at my disposal, was to send my camp to Chopan from Mirzapur, sixty miles, my orderly, Eli Bux, taking a spare horse on to the police post. Then the first day I rode to Chopan and the second morning, getting up early, I made the dash to Dudhi and back to Chopan the same night; the road was only a jungle path and one had to be careful not to miss it when riding fast, as to go off it would probably mean being lost in a trackless forest.

Once being delayed at Dudhi, the afternoon was far advanced before I could start on the ride back. It was most weird in the half light between the trees: every now and then one passed a pile of stones erected on the spot where some unfortunate had been taken by a man-eater.

When I was about six or seven miles from Chopan, it became completely dark, and the trail invisible; to try

and push on would have been madness as I would certainly have missed the track sooner or later and been lost. Dismounting, I quieted my horse which was very frightened, and waited; after about an hour I heard shouts and saw lanterns approaching. My servants, becoming alarmed when I did not return soon after sunset, had formed a rescue party with *shikaries* and police and had come out to try and find me.

Shortly afterwards the Governor of the Province sent an order forbidding me ever to repeat the ride, and this perhaps was just as well, as had my horse come down and I been injured in the fall, my chances of being heard of again were very slight.

I rode once from the Police Post to Chopan, holding a man who was very ill on another horse. The whole distance, over twenty miles, had to be done at a walk, and it was impossible to relax my hold for a moment as, if my patient had slipped out of his saddle it would have been very difficult for me to lift him back, at the same time controlling the two horses, and remounting myself. It was the most exhausting thing I have ever done.

Two rather remarkable tragedies occurred near Chopan during my time in the district.

A party of forty-four Indians were crossing the river Sone in a large country boat when it was high flood during the rainy season. When near the centre of the river, which at this time of the year is more than a mile wide, the boat was suddenly rammed by a huge tree-trunk which was being swept down stream. The boat at once sank and forty-two men were drowned, but two made a jump for life and succeeded in getting on to the tree.

They were carried rapidly down the river; after two days one became exhausted and fell off. The other man was rescued over 300 miles down the Sone in Bengal where the trunk grounded on a sandbank. He was nearly dead from want of food and the strain of holding on, but eventually recovered.

The victims of the other tragedy were a party of nineteen prisoners sent out from the district jail at Mirzapur under an Indian police sergeant and escort. They were on their way to be tried by the Magistrate of that Division of the District who was touring his division and at the time in camp to the north of Chopan.

The prisoners, in addition to being handcuffed, had a light bail chain which passed from one prisoner to the next with the object of preventing them when passing through thick jungle from breaking away from the guard and scattering, when their recapture would have been difficult or impossible.

When passing through some tree jungle the party was overtaken by a severe thunderstorm. It was one of those tropical thunderstorms in which blue lightning appears to be darting along the ground in all directions. One prisoner was struck and the lightning was conducted along the bail chain. The escorts alone escaped.

The majority of the nineteen bodies showed nothing externally or internally to indicate the cause of death, but one man had marks of contusion and a deep lacerated wound in the back as though produced by a blow from a blunt dagger. His clothes were torn and singed and a metal disc was partly fused.

Markings of a peculiar arborescent form have fre-

quently been reported on the skin of persons struck by lightning and are popularly considered to be a reflection of the surrounding foliage; some of these bodies showed this peculiarity, but this arborescence is due really to divarications of part of the electrical discharge producing a special inflammation of the skin.

I was enabled once to verify a remarkable escape from lightning; a boy in an Indian boarding school was asleep at night during a violent thunderstorm, on a second storey balcony. A cornice of the building, two feet thick, directly above his bed was struck and penetrated by the current which then passed downwards and through the boy's under-sheet and mattress — he had no top covering. Striking the floor below the bed, it passed sideways into the dormitory, partly fusing one leg of this boy's bed on the way, crossed the dormitory, fusing the leg of another bed, and then went to earth through the far wall which it split with a deep rent.

A clear hole about the size of half a crown with charred margins was bored through the sheet and mattress; careful examination of the boy and the bed showed that he must have been lying on his back with his thighs well separated. The current passed between his thighs and left the boy practically unhurt in any way.

§ VI

While at Mirzapur I paid more than one visit to the little town of Bindachun, where is the temple of the goddess Bhowani, the holy place of the Thugs, which was at one time frequently filled with hundreds of murderers

from all parts of India, men who, it has been estimated, have slain three million of their fellow-creatures.

Often, after inspecting the small hospital almost under its shadow, I have stood by this unhallowed spot and thought of the baffling psychology, which enabled men to live at one time of the year as worthy citizens, kind and considerate husbands and fathers — for such was their reputation — and at another time to kill with all the cunning and lust for blood of a man-eating tiger, with an inhuman joy and pride in their work, without the slightest compunction for their victims, young or old, and after a pretence of friendship. A Thug was once heard to say, 'The highest form of sport is stalking men.' And it was a sport sanctified, they claimed, by their religion.

The Thugs were no bands of casual assassins impelled to commit crime by force, by poverty or need. They had received years of training in their hereditary profession, practised to the honour and glory of their terrible goddess, Bhowani. A remarkable fact about the sect was that they belonged both to the Hindu and Mohammedan faith. They murdered for the lust of killing. Robbery was of secondary consideration and not the principal motive, their victims frequently being the poorest of the poor. They murdered men only, as a rule, not women; and, while they sometimes killed women who might be troublesome witnesses against them, they never assaulted or ill-treated them beforehand. The killing had to be done by strangulation, and without the shedding of blood, by means of the *ruhmal*, a piece of cloth like a large handkerchief — that is what the word means in Hindustani — some thirty inches in length, with a slip knot, and a knot at each

end to give a firm hold. The material was sometimes in yellow and white, the Thug colours. This was thrown round the neck of the victim with a dexterity born of long training, bringing him to the ground. The Thug then gave it another turn round the neck and, putting his foot against it, drew it still tighter.

The gang was well organized, two men generally taking part in the actual strangulation. Apart from the manipulation of the *ruhmal*, three other men seizing and holding the legs and arms of the victim or giving a disabling blow — perhaps in the pit of the stomach. Other associates were employed to bury the dead and as scouts. The whole proceeding was carried out under the strictest discipline and rules.

Thugs believed that in former days their goddess relieved them of the necessity of burying their dead by devouring them herself. But a young Thug disobeyed her strict injunction never to look back on the scene of a murder, and, angered by this, Bhowani ordered as a punishment that in future the victims were to be buried. As a concession she presented one of her teeth to be used as a digging tool. This was the origin of the sacred *kussee*, half-spade, half-pickaxe, which was consecrated with special ritual before Thugs set out on each of their expeditions, and which was carried in the waistband always of a leader, who was selected for his special skill. This tool, which was more sacred to a Hindu Thug than Ganges water, and to a Mohammedan Thug than the Koran, was believed to be endowed with miraculous powers. In the beginning it was thrown every night into a well as a means of hiding it. In the morning, according

to tradition, on being summoned, it returned without human aid to the waistcloth of its owner. Thugs have affirmed that they have seen this happen over and over again. Later in the history of Thugee it was buried at night with the point in the direction that the band intended to take the following day in search of further victims, and it was held that, when dug up in the morning, the point would be found pointing in the direction which would give the gang the chances of greatest success. It was believed, also, that the sound of digging the graves with the *kussee* was inaudible to all except a Thug.

The following is the method by which these murderers worked. Every year an order was circulated among the members of the band, who were engaged in all kinds of respectable employment, to assemble at a certain time and place. They arrived at the rendezvous in the same frame of mind as that of the Britisher who sets out for a day's pigsticking or a shooting expedition, with a feeling of the highest elation. Having elected their leader, they proceeded to carry out elaborate ceremonials in honour of their goddess, asking her for an omen, without which the expedition would never start. The omen generally came in the cries and answering cries of birds, when a start was at once made. The gang, perhaps to the number of fifty, spread themselves out for miles along the road, in all manner of disguises, some as beggars, others as traders, pilgrims or soldiers. They were skilled actors and practised extraordinary cunning in trapping their victims. The usual method was to meet travellers casually on the road, and in order to disarm any sense of suspicion, to travel perhaps for days together, ingratiating themselves

in every possible way with their future victims. Then by careful questioning having arrived at the conclusion that their prey did not reside in the neighbourhood, when their disappearance might have been noticed, and having reached a sparsely populated region, the gang reassembled and on a given signal, generally a common phrase such as *Pani lao* — bring water — the *ruhmal* was brought into operation. The bodies were then disjointed and doubled back to enable them to be buried in the smallest possible space, and deeply gashed to prevent the bodies from swelling in decomposition which would disturb the earth above their shallow graves, the careful concealment of which was a most important part of the Thugs' activities. Then followed a feast, often over the graves, with prayers and other devotions to Bhowani, including the sprinkling of water over the sacred *kussee* and the giving of *gur* (sugar) to each Thug entitled to strangle. Should the murdered have been in possession of much loot this was quickly disposed of in order to remove all traces of guilt and to be unencumbered for the next operation. After six or seven weeks the Thugs divided the spoil and returned to their normal occupation.

The most notorious Thug was a man named Buhram who when finally captured confessed to 931 murders, but there were many others whose totals could be counted in hundreds.

What a hideous drama! If the confessions of the leading Thugs had been written in fiction, their record would be looked upon as gross and incredible exaggeration. Surely the activities of Al Capone and Public Enemy No. 1 pale by comparison with such records.

My readers must remember that the suppression of Thugee was not accomplished in a few years. It was a matter of great difficulty and went on for a long period of years. I am quite convinced that Thugee, like Suttee, would return to-morrow if the British left India to-day; in fact even now isolated incidents crop up from time to time. I can, however, remember one Thug of the old regime who as a young man had turned Queen's Evidence in order to save himself from the gallows and was given a life sentence. His name was Makhum. He was a kind, gentle-mannered old man, conscientious and thorough in his jail work and liked by all his fellow prisoners and warders. It was difficult indeed to believe that such a man could be guilty of the diabolical murders to which he had confessed.

A form of crime often referred to as Thugee exists to-day, but this differs as much from the religious fanatical murder as the American term of Thuggy applied to 'hold-ups'. I refer to poisoning by datura. This is a drug belonging to the belladonna group, and used by road robbers not to kill, but to render their victims unconscious for the purposes of robbery.

Dacoity, on the other hand, is of course practised in varying degrees all over India to-day, and in almost every jail dacoits are to be found, but in times of famine and distress they become more numerous.

§ VII

While I was in medical charge of Benares in 1904 I would receive as many as ten or twelve calls a day to

attend in consultation wealthy devotees in their last moments. Not that I was able to do much, but it appeared to console the relatives.

It was a most moving experience to see the wonderful peace that came with the attainment of religious salvation, for whoever dies with his or her feet lapped by the sacred stream, be he Brahmin or Untouchable, is sure of going direct to Siva's heaven. Kasi, or Benares, is the Hindu's Holy of Holies, yet it is not to the Hindus alone that it is sacred. The divine memory of Sakya Muni, the Buddha, who went there in the sixth century B.C., broods over all this region.

The architecture of the existing city is not notable and the buildings are not of great antiquity, as under the Mohammedans, from the Emperor Alauddin, A.D. 1300, down to the time of Akbar the Great, Hindu Temples were razed to the ground and the sites and stones were used for erecting the mosques of the conquerors.

There are now about 2,000 temples, the greater number built during the period of Mahratta rule, or subsequently to the city becoming British territory in 1775, but they are mostly small and situated at the angles of the narrow winding streets; many, however, are decorated with exquisite and elaborate carving of beasts and flowers.

The most important is the Bisheshwar, or Golden Temple, dedicated to the god Siva, the god who is accompanied by the sacred bull, Nandi; the courts of this temple are always thronged with devout pilgrims, clanging the temple bells, garlanding the gods, or placing offerings before them. There are many idols of Ganesha, the god of good fortune and learning, the son of Siva, the destroyer,

and the terrible goddess Kali, continually thirsting for blood and the death sacrifice. Ganesha is the squat figure with an elephant's head; according to the legend, the first time his mother Kali saw him his head was reduced to ashes and was replaced by that of an elephant which was fastened to his shoulders. But countless localities in this medley of consecrated places are the scenes of some reputed miracle, ancient or modern. At the Kedar Ghaut is the wonderful 'Well of Gansi' which will cure all diseases, particularly dysentery. Near by the Bhairav Ghaut is the silver-faced goddess, Mata, who infallibly protects from the disfiguring disease of smallpox.

At Rao Sahib Ghaut is an image of Bhima, which the Brahmin priests teach is yearly washed away by the Ganges to be as regularly brought back again at the appointed time. Again there is the Mansarovar Stone lying in a tank with its legend that it grows daily by the breadth of a millet seed. Among others may be mentioned Shunkareshwar's shrine where wives pray for handsome sons; the Duyan Kup or Well of Knowledge, believed to be the dwelling of the god Siva, a foul-smelling cavity full of the decaying remains of the votive wreaths of the faithful; the temple of Anerapurna, the Goddess of Plenty, who has never allowed famine to visit Benares; the Charanpadah where the feet of Vishnu are clearly imprinted on a circular stone, and, close by the Manihamiha ghaut, a well said to have been dug by Vishnu, and filled with his sweat. Crowds of pilgrims push and jostle to bathe in its holy waters. Vishnu, the preserver, is the second god of the Hindu Trinity, with Brahma the creator and Siva the destroyer.

By a curious irony the most beautiful structure on this hallowed Hindu soil is the all-dominating Mohammedan mosque of Aurungzeb, with its slender towering minarets. It was built by the last of the Mogul Emperors in the centre of the Hindu quarter, with the stones of their demolished temples, as a deliberate insult to the rival faith.

Benares stands on a bluff about eighty feet above the Ganges, the river making a fine sweep four miles in length. Extending along the outside of the curve, the city forms a magnificent panorama.

The face of its steep cliff rises as an amphitheatre of countless palaces, temples and pilgrim houses, for every ruling Prince and wealthy man of the Hindu faith has a temple on the bank. There is an unbroken line of shrines, pinnacles, towers, idols, altars, sacred trees and flag-poles. The cupolas rise, tier upon tier, like crowns above the broad grey flights of Chanar stone steps, leading up from over fifty bathing places, the favourite of which is the Scindia ghat.

In the centre of this teeming water-front lies the principal burning ghat-ground, a place of special sanctity. The cremators are piling up sandal-wood and cowdung cakes in readiness for the next funeral pyres; near by lie the still figures covered with white and red palls from which protrude only the rigid cold feet lapped by the edge of the stream. These are the Happy Dead, happy in having passed to the Gate of Siva's paradise on Ganga's shore.

Before us at the moment are a multitude of a hundred thousand people, young and old, gay and laughing temple

girls, woeful and scorned widows; rich and poor; high caste Brahmin ladies, who for the moment have thrown off purdah, safe in the sanctity of their surroundings, men and women of the Untouchables; ash-pasted *saddhus* (holy beggars) and *yogis*; *gurus* (learned men) intoning the Vedic scriptures, and painted Holy Men rapt in their devotions; the healthy and the sick. Here is a dysentery patient, there a man terribly disfigured with leprosy. To this hallowed centre flock all the afflicted of the Hindu race, for whosoever bathes in the sacred Mother at Kasi and drinks her water may be cured of any or all the diseases to which the human race is heir.

There are numberless religious fanatics endeavouring to prove their holiness with every form of self-inflicted torture, lying on a bed of spikes, piercing their cheeks and hands with sharp nails, or standing erect, week in week out, under the blazing sun with an arm raised directly to heaven, until the member is permanently fixed in that position by adhesions in the joints and atrophy of the muscles.

Over 30,000 priests are always busy on these ghauts, caste-marking and anointing the endless stream of pilgrims. While the permanent population of Benares is ordinarily about a quarter of a million, on a special festival, such as an eclipse, as many as half a million people may pour into the city in a day, while the number of pilgrims in a year amounts to millions.

Here and there a sacred bull noses its way through the crowd, and countless pigeons fly in and out among the tamarind trees and sacred flag-poles. There is a riot of colour from the many-hued clothes of the people to the

chains of yellow marigolds stretched across the water's surface to welcome Mother Ganea, as she comes to the holy city.

With the break of day a great wailing chant rises from these thousands upon thousands of worshippers. Standing waist deep in the sacred waters, repeating over and over again ancient Vedic verses and the sacred syllable '*Om*', '*Om*', all are absorbed in a religious frenzy amounting almost to a trance.

Women in soaked clinging garments, their long dark hair dripping wet, and men completely naked, all lifting handfuls of water and letting it stream through their fingers, throwing it three times into the air, then dipping their bodies beneath the surface and finally sipping the holy liquid; in perfect confidence and faith that their souls are being purged by these acts of faith.

Looking down on this marvellous scene of devotion, a great sympathy goes out to these masses, and although professing another creed, one stands in awe and veneration before the high altar of 270,000,000 of the human race.

CHAPTER III

FAMINE AND CHOLERA

§ 1

Of all the ills that befall mankind none is more terrible than famine. War and epidemics such as plague cause an infinite amount of suffering, but they are not accompanied by the same physical and mental distress and feeling of helplessness affecting the entire population.

In epidemics some members of a family will escape, but in famine all are involved, and to a parent the experience of watching the long-drawn-out struggle of a child must be terrible.

I have had much practical knowledge of famines. In the famine of 1908 I held charge of the Mirzapur district with an area of 5238 square miles and a population of close on 1,250,000.

The suffering is so prolonged: there is first the knowledge of the onset some six or seven months beforehand, and after the period of actual want the economic chaos and frequently ruined health which follows in its train. The great point in the administration of a famine is to keep well ahead of developments; if you are not ready with relief work as soon as required the mortality is certain to be great. Fortunately there is ample time for preparation and in the Mirzapur district we knew at the

beginning of October that the scarcity would begin in the following March or April, and it was possible not only to make an estimate of its general severity, but also to gauge the degree in the several divisions of the district.

For example, the northern part, in which there was comparatively little scarcity, was well served by parallel lines of railway, but to the south the district extended for 120 miles without any railway communication and with metalled roads only for the first twenty miles. So that some idea of the difficulties of transport and inspection can be imagined.

There are many danger signals pointing to the time when relief has to be commenced, such as rising prices, increase of petty crime, people wandering aimlessly in search of work. Too much importance cannot be attached to moral strategy, as in the East hope quickly turns to despair and despair to dull resignation. In a word every effort must be made to prevent the loosening of social and moral ties which is the unfortunate accompaniment of an economic disaster like famine.

There is always a list of works of public utility in every district to be carried out in time of famine; it is then decided as to how these tasks can be carried out to the best advantage in the stricken areas. These relief works consist of roads, embankments and large reservoirs for storing irrigation water. The Executive then arranges for finance and general administration with officers in charge of each section. The Public Works Department prepares plans of what has to be carried out, appoints assistant engineers and overseers, and indents for the many thousands of tools required, water-carts, etc. I, being in charge of

the Medical Department, had to provide temporary hospitals, recruit doctors, indent for medicines, equipment and stores, and draft rules for sanitation.

The people are collected into camps of about 7000, at distances of two to three miles apart, along the line of the new road. The men of the family dig out the soil and the children help in filling it into baskets which the women carry on their heads and dump on the embankment.

At the end of the day's work the people are not paid a standard wage, but the head of the family is given, in accordance with the current price of grain, sufficient money with which to buy enough food for two good meals for the family, Indians not eating more than twice daily.

The banians or merchants always bring ample supplies to every famine camp, from other parts of India, but should there be any question of the stores not being sufficient on account of difficulty of transport or other reasons, the Government officials make the necessary arrangements.

Housing is not necessary as it is the hottest time of the year and the people make shelters for themselves under the trees; directly the monsoon breaks, the relief camp is largely vacated and the people return to their homes to cultivate their fields.

Sanitary arrangements have to be enforced, especially the protection of the water supply. One of the greatest difficulties in famine administration areas comes when the water supply begins to fail and numbers of wells have to be sunk, or larger quantities of water transported over jungle tracks and unmetalled roads.

To keep in touch with such a large area I had to be almost continuously out inspecting camp after camp and hospital after hospital. The heat was intense; all the work had to be done in the saddle and often there was little water to drink. In some places the flies buzzing round my head and neck were almost past endurance. I tried wearing a green veil with the object of keeping off both flies and glare, but found it intolerably hot. As the heat increased I made the longer rides during the night, sending out *syces* (grooms) with additional ponies every fifteen to twenty miles. One night just before daybreak when crossing a rocky plateau I noticed a most uncanny sight. A ridge away to the east against the skyline appeared to be on the move; this movement became more intense and, scenting some kind of danger, I manœuvred my horse between two large boulders and waited. Suddenly the cause was apparent: it was due to great numbers of wild pig on the move across country. They streamed past and did not notice me between the rocks, but had I remained in the open some of the boars would probably have attacked, when without a weapon I should have been at their mercy.

Famines have occurred in most countries and in all ages, but with the advance of civilization the scourge is becoming less frequent, less devastating, and confined to more circumscribed areas.

The natural causes of famine are failure, or partial failure, of crops, due to meteorological phenomena such as excessive, insufficient, or faulty distribution of rainfall; other important factors, though operating on a smaller scale, are frost, hail, and the ravages of insects.

The artificial causes may be summed up under economics and war; the former affecting production, transport, distribution and marketing of food supplies, currency restrictions and undue legislative interference with agriculture; while these conditions have all caused famine in the past, it is improbable that they will be operative to such an extent in the future.

In recent years entomologists have rendered invaluable service by combating in many ingenious ways the hosts of insect pests which prey on every kind of agriculture.

A swarm of locusts will completely devour the crop on which it alights, but in India their invasions are not frequent, are limited to comparatively small areas, and do not cause the same damage as they have done in parts of the Argentine and in Algiers.

In Algiers, however, the French have succeeded in stamping out the pest.

A swarm of locusts can be prevented from settling on the threatened crop if sufficient noise by the beating of drums, pots and pans, etc., be made. I have seen locusts settling on the railway line completely dislocate the traffic and bring trains to a standstill; their succulent bodies crushed by the wheels prevent a grip on the rails. A goods train between Agra and Bharatpur was stopped in this way and it took nine hours before that section of the line could be cleared, the train having to be divided up into four parts before it could be moved.

In tropical countries, however, drought, or the faulty distribution of rainfall, is the commonest cause of famine. In the Mirzapur district the total rainfall for the period June 15th to September 30th, 1907, was slightly above the

normal, but unusual distribution led to a failure of the crops.

Not many years ago there was an area twenty times the size of England that the Government realized was not secure against the ravages of famine.

Irrigation works have done marvels to protect the country from famine since 1878 when the Government revised their policy and recognized that famines must be met by preventive measures, more especially irrigation schemes, and not by saddling the country with an internal debt.

The general plan of the Indian irrigation works is to intercept the great rivers as they emerge from the hills on to the plains, diverting the water to the watershed that runs parallel with the streams; it can then be distributed by gravitation over the surrounding country.

The Ganges is tapped at Hardwar and thence, by five thousand miles of main and branch channels, is eventually led back to its natural bed at Cawnpore, 400 miles nearer the sea.

The Chenab canal in the Punjab, one of the largest and most profitable in India, was commenced in 1889, and flows through an area that was practically desert. In 1901 this canal watered 1,830,525 acres and a special scheme was launched of importing colonists from the more congested parts of India. This scheme was so successful that in 1901 the population of the immigrant colony was 792,666, consisting for the most part of thriving and prosperous farmers with occupancy rights in holdings of about 28 acres each. The direct revenue of this canal in 1906 was 26% on capital outlay.

Many of the irrigation schemes are bold and ingenious. The Periyar scheme in Madras is a good example. This district of Madras was watered by a large number of shallow tanks depending for their supply on a river of uncertain volume, the Vaigai.

This river rises on the eastern slopes of the Ghats (a range of mountains) but immediately opposite, on the western slopes, is the source of the river Periyar. The rainfall on the west is very much greater than that on the east of the range. The Periyar by a short direct course poured its torrential waters into the sea and was therefore lost. The waters of Periyar were taken from one side of the range to the other by erecting a masonry dam 178 feet in height, forming a huge lake; from the east end of the lake a tunnel nearly 6000 feet long pierces the watershed and discharges 1600 cubic feet per second down the eastern slope of the range into the bed of the uncertain Vaigai.

This road and tunnel had to be constructed in wild and difficult country and the working parties were attacked by malaria and cholera, but in spite of all difficulties the work was successfully accomplished.

India of all countries in the world is most liable to famine as so much depends on the monsoon rains. The monsoon is a heavily moisture-laden wind which is drawn into India by the great heat of April, May and June. Thirty or forty years ago the monsoon burst in the United Provinces with extraordinary regularity about June 15th, but it has receded until now it may be as late as July 20th, and this postponement is considered by some to be due to the increase of irrigation, which pre-

vents the temperature from rising sufficiently high to draw the monsoon into upper India.

The total rainfall for the whole of India is always sufficient for a good harvest, but, as already mentioned, every year some areas suffer more or less severely from the uneven distribution.

India is afflicted with famines periodically and this is thought to be in some way connected with the sun-spot period. However this may be, the area of scarcity expands every six or eight years to include the fourth part of a district, and once or twice in a century a whole Province.

Monsoon failure completely destroys the harvest and stops all agriculture for a whole year. The ryot or labourer is workless, and as five-sixths of the whole population are employed in agriculture this becomes a national calamity. He first uses up any grain he has left in his store, and then his seed, and while there is plenty of food to be bought in the village bazaar he has no money with which to purchase.

Famines have been recorded in India as far back as A.D. 650, when the whole country was devastated. No less than 10,000,000 persons or a third of the Province of Bengal are said to have perished in 1769-1770.

In 1838 the United Provinces lost above 1,000,000 people, Bengal a similar number in 1886, and in 1869 Rajputana lost over 1,500,000.

There were famines in 1897, 1899 and 1901, but by this time the Government of India had organized against the scourge and the Famine Code had been drawn up for each Province. The extension of the railways allowed

the transport of food from other Provinces, the only difficulty was the provision of sufficient rolling stock to deal with the enormous demand.

It has been contended by Indian agitators that famines are becoming more frequent under British rule on account of the impoverishment by an excessive land revenue. But while the British land revenue in India is £16,000,000 the Emperor Aurungzeb collected £110,000,000 annually over a smaller land area.

Also the Census Commission estimated that in the famine of 1901, three million people succumbed in the Native States, and only one million in British India. Of the total population of the Indian Empire the Native States hold only twenty-three per cent.

In the old days the native rulers of India appear to have made little or no effort to relieve the terrible sufferings of their people in times of famine.

Some notion of the suffering which must have occurred under the Moguls will be obtained when it is stated that famine in those times was so terrible that it lasted as long as ten or twelve years and populous cities were left without a single inhabitant.

Very different is the position now. In 1900 the Maharaja of Jaipur presented sixteen lacs (a lac is approximately £7500), which five years later was increased to thirty lacs. This sum is controlled by trustees selected from all parts of India, and the income is devoted to charitable relief in times of famine.

For persons who have been starved beyond a certain point recovery is impossible: the stomach and intestines become shrunken and contracted while atrophy of the

internal organs has taken place. Old persons bear deprivation of food better than middle-aged persons, and middle-aged persons better than children. During the Hissar famine in 1898-99, I tried an interesting experiment by taking twenty boys of about fourteen years of age into hospital under special conditions of nursing and treatment, with a view to ascertaining if it was possible to save their lives.

Their emaciation was terrible: as they lay in bed the thin abdominal wall appeared to rest on the spine, their heads were like skulls over which a yellow parchment was stretched. To have given these poor boys anything in the way of solid food would have at once produced a fatal result, so a beginning was made with very dilute barley water, but in spite of every care and endeavour the experiment was a failure as all died but one. Death is said to take place when over two-fifths of the original body-weight has been lost.

With the termination of famine in Mirzapur my energies could not be relaxed for a year or two. The people whose resistance to disease has been so lowered suffer severely from malaria and dysentery so that additional medical facilities had to be provided. But by this time I was so ill and worn out with malaria myself that I was invalided home in April for nine months, returning to take charge of the Naini Tal district.

§ II

Cholera, that dread scourge so dramatically sudden in its onset, and in severe cases so rapidly fatal in its

course, a scourge that has wiped out millions upon millions of the human race, is one of the few diseases that can be diagnosed at a glance by those experienced in its epidemic form. The face contracted from the loss of fluid, the nose thin and sharp, prominent cheek-bones and deeply sunken eyes, combine to make a picture that cannot be mistaken.

Fortunately this devastating disease is now coped with by modern scientific methods. I may explain that the poison results in a great drain of fluid from the body, and, as a result of this, such a thickening of the blood that it becomes almost the colour and consistence of black treacle. The object of treatment by the direct injection of common salt and water into a vein, often to the extent of three or four pints, is to reduce the thickening of the blood and restart a normal flow through the arteries and veins.

It is often necessary to carry out this operation under difficult conditions. Here is an example. One night in the summer of 1903 in the city of Mirzapur, I was called to see a wealthy Bengali lady who was returning from a pilgrimage to the Ganges at Hardwar. I was ushered into a long low room containing forty or fifty attendants and followers of the lady, the windows were all tightly closed — very characteristic, this, of the treatment of illness among Indians; there was a charcoal brazier burning and the heat was literally staggering.

The only illumination was from three or four Indian lamps, the naked wick burning in a bath of oil with the result that the light was poor and fitful. One glance at the patient showed her to be in the last stages of cholera collapse.

The servants realizing how near the end was had performed the ceremony of *Godana*. This is one of the ceremonies observed during the last moments of a Brahmin's life. A cow is brought into the sick room after the animal's neck has been wreathed with garlands of flowers and the horns ornamented with bands of gold or brass and the body clothed with a coverlet of red cloth and ornaments — in case of urgent necessity without adornment.

The cow is taken up to the sick bed and the tail placed in the patient's hand while prayers are offered up that the cow may lead the dying Brahmin by a happy road into the next world. This ritual is essential if a Brahmin wishes to arrive without misadventure in the Kingdom of Yama. Bordering this kingdom is a river of fire, which all men must cross after death. Those who have made the sacrifice will find on the bank a cow which will help them to gain the opposite bank untouched by the flames.

In this particular case the lady's room was in an upper storey inaccessible to a cow; in such circumstances a cotton thread is fastened to the dying person, carried across the room and down the central courtyard where it is attached to the cow's tail.

Attending a dying Brahmin in his last moments is frequently a difficult matter, for as soon as the relatives realize that the passing is near, they make a rush for the bed and, seizing the patient, place him on the ground; a Brahmin must not be allowed to die on a bed or even on a rug or mat. The soul on leaving the body enters another body which leads it to the Abode of Bliss. If by chance the dying Brahmin were to expire on a *charpoy* (native

bed) he would be compelled to carry it with him wherever he went, so with his last gasps he is deposited on the earth with the object of relieving him of this incubus.

In the present case immediate action was necessary if the life was to be saved, but in the dim and flickering light it was difficult to find a vein, and to operate, a difficulty that was further increased by the stoutness of the patient and the excitability of her servants.

At last a vein was laid bare and opened, and the life-giving salt and water gradually run in. The beneficial effect was soon apparent to the attendants whose excitement became so intense that the brazier was upset and a large pile of clothing and blankets set on fire. Such was the nervous tension and fluster that no one was capable of extinguishing the flames. At last I was compelled to stop the operation, cover the wound, and deal with the outbreak myself.

The operation was then resumed, and further marked improvement in their mistress caused such a thrill, that the brazier was again over-turned and another fire started. The operation had now reached a critical stage, and it was impossible to abandon it even for a minute. The conflagration increased and in spite of my entreaties nothing effectual was done, and the door jambs were actually alight before I was able to leave the patient's side and extinguish the fire.

Eventually the lady made a complete recovery and returned to her home in Bengal. But I shall never forget my combined efforts of surgeon and fireman in the terrific heat of that room with the frenzied mob of well-wishing but paralysed retainers.

During the severe famine of 1909, I was in constant fear of the possibility of pilgrims returning from Mallas or religious Fairs at the pilgrim centres of Allahabad or Hardwar infecting the wells of the famine relief camps.

In times of famine, as I have said before, the inhabitants of the stricken areas are collected into camps of about seven or eight thousand, at intervals of two or three miles, along the line of relief works. It is, of course, a vital necessity to safeguard the water supply.

Every Hindu when moving from place to place carries with him a *lota* or brass pot and a line of stout string as, according to his religion, the water must be pure in order not to defile the drinker; for a Brahmin it must therefore be drawn and carried by himself or by a member of his own caste. To drink water drawn by the hands of a lower caste man or woman would be a sin so great that absolution could only be obtained at the cost of elaborate and expensive ceremonies.

If by chance the earthen water-pot of a Brahmin touched that of a *sudra* (low caste) the Brahmin would immediately break his pot. In some of the native states Brahmins will forbid any other caste to approach certain wells.

The *lota* is the source of an untold amount of infection in times of cholera epidemics. It is lowered by means of the string into a well and then used to give a drink to a cholera patient; if, being left by his side, it becomes accidentally bespattered with particles of the patient's ejecta, it becomes a source of great peril, for the smallest drop of such discharge contains many thousands of cholera microbes.

The cholera microbe multiplies by simple fission, each division taking place about every twenty minutes, so a brief calculation will show that in eight hours a single cholera microbe can produce over sixteen and a half million of its kind. Small wonder then that a well rapidly becomes a deadly source of infection; and the *lota* again spreads the infection from this well to another and so on down the route taken by the pilgrims.

About four o'clock one very hot afternoon in the month of June, information reached me that a band of pilgrims had entered the district and were proceeding south along the line of one of the famine relief camps. Realizing the danger, I started at once to ride to the first camp, a distance of about thirty-five miles. The heat was terrific, about 116° in the shade, and it was only possible to carry a small amount of water.

My object was personally to supervise the disinfection of all wells already passed by the troop of pilgrims, and so prevent if possible the infection of the wells ahead.

I reached the neighbourhood of the first camp, which was situated in a forest, between 10 and 11 p.m.; it was a glorious moonlight night, the peculiar odours of the Indian jungle pervaded the atmosphere, the full moon glinting between the trees cast weird shadows across my path, but as I approached the camp there was a deadly stillness, an ominous silence. Was I too late? Was this the hush of death? My mount, although tired out, was displaying that restiveness so often shown by horses in the presence of the dead. A short distance on and the camp burst into view. What a scene! Dozens of stricken forms, strewn about in the moon's rays in every posture

and position, some lying, some partly sitting, many contorted and showing unmistakable signs of the agonizing cramps that are one of the final symptoms of this disease.

Unforgettable was that night alone in the jungle with those ghostly forms. The fitful light made the apparition even more spectral. The silence was broken now and again by the stealthy movements of wild animals round the outskirts of the camp, ready, as soon as I departed, to return to their gruesome preying on these unfortunates. I admit it was a struggle to keep my nerve.

Too late here, I had to make every effort to press on, and get ahead of the infecting band. It was not until another twenty-three miles had been covered that I did get ahead of the pilgrims, and was able to stop any further spread of the infection by putting potassium permanganate into the wells. After visiting the other camps in the neighbourhood and making as certain as possible that there was no further danger, I started to ride back to Mirzapur, a distance of just on fifty miles. After going about a couple of miles I was quite suddenly attacked with all the symptoms of cholera. The pain was so violent that I had to dismount and lie flat on the ground. The position was not reassuring! I was quite forty-eight miles from home. There was no means of sending an S O S, no way of covering the distance except on two tired horses in extreme heat.

After I had been lying on the ground for an hour the symptoms gradually abated, and I remounted and made a determined effort to push along. This was painful to a degree at first but towards the afternoon all symptoms had disappeared. I reached home in the early evening a

physical wreck, but with the satisfaction that although my effort was a failure in the first place it had ultimately been successful.

Six years later I suffered from a mild attack of true cholera in Nepal, but my trouble on the occasion just described was not true cholera; it was either an attack of nerves or a choleroid condition, similar in symptoms, but not due to the cholera germ. In any case I had taken the precaution of not allowing anything to pass my lips during the 108-mile ride, except the little water I was able to carry at the beginning.

Years later, when in charge of the Agra district, I discovered that a small well in the gardens of the Taj Mahal, much frequented by pilgrims, was nearly always responsible for the minor outbreaks in that city, and that prompt disinfection of the well stopped further outbreaks.

Many years ago the water filters of a British regiment stationed in India were accidentally filled with cholera-infected sand taken from the bed of a river. In one night eight officers and seventy-two men died. The onset was so sudden that the officers could not be moved to their bungalows and they died in the mess. I remember a brother officer leaving the mess at about 10 p.m., apparently in perfect health; he went early as he was to be married next day. Shortly after midnight he was attacked with cholera, and in spite of treatment died in the early hours of the morning, and we buried him two hours before the time fixed for his wedding.

CHAPTER IV

SOME JAIL EXPERIENCES

THE administration of justice in India is always difficult as tradition and custom even to this day continue to make serious crime appear legitimate to the ordinary Indian mind, and investigation is continually hampered, complicated and even nullified by the peculiar conditions of a country where long-prevailing custom is supreme.

I remember an important irrigation case in which quantities of canal water had been stolen by certain cultivators over a long period. The magistrate with whom I was living at the time at Muttra returned each day more and more perplexed, saying that he could not get to the bottom of the evidence. The examination of witnesses went on for days. The water had unquestionably been stolen but how it had been spirited away from the main canal was a mystery. Then one day he returned to lunch in good spirits and told me how a single witness that morning quite unsuspectingly had given the whole thing away and showed up a cleverly designed and executed plot, by which an underground channel had been made between the bottom of the canal and the bed of a stream, the volume of which had been so amplified as to give the miscreants all the water they wanted. And this case, which had mystified and worried him for weeks, could now be satisfactorily settled and justice administered that afternoon.

One cannot be too careful and must always be on one's guard even in the apparently simple and straightforward case, as will be seen from the following. The body of one Ram Lal was brought in one afternoon by the police with an accusation of murder against his nephew. The body bore terrible wounds, especially about the throat and chest, but my suspicions were aroused as the skin and muscles had not been retracted as I should have suspected, and the bleeding had evidently been slight. A post-mortem examination revealed the fact that death was due to natural causes — from cerebral haemorrhage — and that the wounds had been inflicted after death. A fabricated case was unmasked and the nephew was saved from a charge that quite possibly might have ended on the gallows.

The carrying out of these post-mortems in the hot weather was a great strain. Imagine the condition of a body that had been carried in by bearers perhaps over 100 miles (there was one police station in my district at Mirzapur 120 miles from the administration centre) with a temperature of about 100° in the shade. There have been occasions when I have been ill even before I could actually get into the post-mortem room, such was the condition of the body; then again one knew that the slightest slip of a knife or a prick from a sharp bone, and one's chances of averting or surviving blood-poisoning were small indeed. In this connection I shall never forget one tragedy. A brother officer and myself had been operating all the morning and were just on the point of going home to lunch when he said: 'I have a small pimple on my face and am going to open it'. Picking up a

cataract knife which he thought was sterile he gave the spot a deep prick. In four days he was dead from acute blood poisoning. Many a time when one has been operating on lepers, the needle has slipped and punctured one's rubber gloves, and the thought has rushed through the mind, 'Shall I contract this terrible disease, which will not only render life almost unendurable, but will make me an outcast to be shunned and avoided like the plague by all my fellow creatures?' But this is merely a passing thought and only one small item in that White Man's Burden of administration in a foreign land, which those of us who have been through it would not have missed for worlds.

But I am digressing somewhat from the point. Here is another case illustrating the difficulties of bringing justice home to the right quarter. An old and much respected Mahommedan named Mahmud Bux was accused of murdering his son Bahadur Khan. The son was a depraved youth always away from home roaming the countryside. During one of his long absences an anonymous letter was received by the police charging the father with the son's murder. The police searched the father's house and found buried in a corner some clothes and shoes belonging to the son, together with a length of stout cord which one of the servants alleged the father had used to strangle his son; he added that he had then helped the old man to dispose of the body by placing it in the river at a spot where the women of the village went down to fill their waterpots. These water-drawing places in alligator-infested rivers are specially dangerous, as an alligator will lie in wait, then suddenly seize by the leg

or arm a woman (it is always the women and not the men who go to the wells and rivers for the household water), drag his victim further into the stream and when she is drowned by being pulled under, quietly proceed with his gruesome meal. The interior of alligators I have shot has time and again revealed large masses of long black hair and endless bangles such as Indian women wear in such numbers.

In further support of the charge against the father some bones were produced from the river at this point. These bones were submitted to me for examination and I was fortunately able to state definitely that the bones in question were those of a woman and not a man. It is possible to do this in some cases but not in all. Up to this point the case was going against the father, who emphatically denied his guilt, stating that it was an elaborate plot on the part of the son to get him out of the way and possibly executed, in which case he would have inherited considerable wealth. The police then instituted an intensive search for the son who after four months was discovered in hiding. He eventually confessed to the whole plot, which had been carried out with the help of his father's servant. Great credit was due to the police for the way in which they investigated and persevered in the search.

Many hard things have been said about the Indian Police in the past, but when it is considered what a number of duties they have to perform, apart from the prevention and detection of crime, such as the collection of supplies of all kinds for military and civil expeditions, it must be admitted that these very poorly paid constables

(the majority receive little more than £1 a month), who are the ultimate agents by which government orders are conveyed to the great mass of the people, do remarkably well. No praise could be too high for their loyalty during the recent years of unrest in India. They have been persecuted, tortured, bombed by political fanatics. On at least one occasion the police station was surrounded and the occupants burnt alive by their fellow-countrymen. Yet in the face of every considerable difficulty and insult they have been true to their salt, to use the Indian expression.

While at Mirzapur in 1908 I was sent to hold charge for a time of the post of Chemical Examiner to the Governments of the United and Central Provinces. The duties covered rather a wide field, from the examination of bombs to a chemical or bacteriological analysis of water, but the major part of my work was the examination of the internals of human beings and cattle for the detection of poison. Dissecting bombs was a nerve-racking ordeal as they differed in construction and matters of detonation. It was never possible to be sure that they would not go off during my manipulations, in which case this book would not have been written. Subsequently a benevolent government provided a steel shield to work behind which gave some slight feeling of security. In the event of an explosion you would only have your head and arms blown to pieces.

On one particular day I examined seventeen bombs, but fortunately they were not charged with that deadly explosive, picric acid. This acid is extremely bitter in

taste and my predecessor had left a smear of it on the laboratory wall with instructions for me to run my tongue over it every morning and note the date when the bitterness disappeared — not an exactly pleasing prelude to the day's work. I never took very kindly to this bomb business and pointed out to government that there was a highly paid gentleman known as Inspector of Explosives and that this work appeared to come more within his sphere than mine. Government replied that he was not competent, and that I must carry on. What this meant exactly I have never been able to fathom, but conclude his knowledge of chemistry was even more limited than mine.

The thing that counts most in a trial for murder by poison is not the oratory of the learned counsel, even if he is famous the world over, but the deadly evidence of the test-tube. Every morning on going to the laboratory I had to test for arsenic, that commonly-used poison both for men and cattle. See how quickly and dramatically the evidence is forthcoming that nothing can shake or disprove. The suspected liquid or solid dissolved in distilled water is boiled with hydrochloric acid and a small strip of copper foil (both of which have been certified as free from arsenic). Now we watch that tiny strip of polished copper. The life of a man depends on whether it remains bright or acquires an iron-grey coating. A minute passes, the liquid bubbling furiously in the test tube. Another half minute. Is the copper less bright? No! Yes! It has an iron-grey coat.

The copper is taken out, treated in various ways and then heated, and the arsenic deposits in minute crystals,

remarkable for their lustre and brilliancy. Under the microscope the appearance of these crystals is not only absolutely characteristic but remarkably beautiful: a single one of less than four-thousandth of an inch in diameter can be easily seen, and one can be measured even up to a sixteen-thousandth part. As I suppose is now generally known, arsenic in small quantities is not a deadly poison to man; in fact in the form of the organic arsenic compounds, the work of that great German chemist Ehrlich, enormous benefit has been found for the treatment of syphilis, recurrent fever and sleeping sickness.

There is an interesting form of criminal poisoning of cattle in India which is resorted to by leather-workers, who adopt it in order to procure cheap hides; it is also used occasionally for homicide. The seeds, roots, leaves, etc., of Indian liquorice may be swallowed in quantities with impunity, but if a small quantity of the seeds or other portion of the plant be bruised and the juice injected under the skin it rapidly produces fatal results. The method usually adopted is to pound the seeds into a paste with water; the mass is then dried into small sharp pointed spikes or needles in the sun. Then two needles, about three-quarters of an inch long, are inserted into holes in a piece of wood with a handle, a sharp blow is struck on the animal's flank, the needles penetrate the skin and are left protruding, and death results in eighteen to twenty-four hours. Scrapings from the needles can be identified under the microscope and thus help to bring to justice the guilty.

There are other poisons I had to look for, one of the

most rare being aconite, a root that has frequently and fatally been mistaken for horse-radish. On one particular day I had two suspected human poisonings with this drug. There is no chemical test and the method of examination consists in making an extract from all the organs of the victim by what is known as the Stas method (so called after the originator), and then applying a very minute drop to your tongue, when a very persistent and definite sensation of tingling is produced. The active principle of this root is probably the most deadly poison known and so little as one-fiftieth grain is believed to have proved fatal. The first of these two cases I analysed in the morning and finished by the early afternoon, when a minute droplet taken from the few drops of the total extract gave me slight but definite tingling of the tongue. As I knew the second case would take well into the evening I sent the laboratory staff and my assistants home at the usual time. About 7 p.m. the extract was ready and I took up a glass rod and applied a drop to my tongue. Whether I was anxious to get home after a long day, or whether it was that the first case had not produced severe tingling, I do not remember, but I used much too large a drop. Almost at once there was a burning pain, my tongue felt as if it had been seared with a hot iron, and my mouth appeared to swell and I had an awful feeling of suffocation. This was followed by a feeling of cold numbness, paralysis and dimness of vision, with laboured breathing and irregular heart action. I realized at once my mistake and endeavoured to reach the telephone but only succeeded in sinking down into an armchair by my desk. But my mind was clear up to this

point and I realized the importance that, should my condition prove fatal, as it was apparently likely to do, some explanation should be given. I made one more effort and succeeded in scribbling on a pad 'accident' and then lapsed into unconsciousness. Late in the night my assistant and servants found me and carried me home, and it was several days before I completely recovered. I have never again had a case of aconite poisoning to examine, but should it happen the lesson I learned would make me extremely careful.

Law and custom have long established the principle that a barrister in defending his client on a murder charge has a right to make use of any reasonable means that he can devise for the defence. At times the questions put to a medical witness are difficult or almost impossible to answer, not because one wishes to withhold facts from the opposing counsel, or feels annoyance at irritating insinuations as to one's special knowledge and experience, but simply that they are too unintelligent.

Many years ago I was giving evidence in a murder trial at Muttra. The victim had been decapitated by some sharp instrument, probably a sword. The body was recovered from a canal, but the head never found.

In my evidence I had gone into great detail to show what a razor-like edge the weapon must have had. Judge of my surprise when the defending counsel rose to cross-examine me. Having arranged his papers with great deliberation, he pulled down his gown, cleared his throat and then asked: 'The injuries which you have described, could they have been produced by the kick of a filly?'

While one goes into court, of course, with all the notes, memoranda, documents, and books of reference which may be called into question in evidence, one must not refer to any written or printed matter while in the witness box, not even to refresh one's memory. If one does so, the law of evidence is such, that the opposing counsel can demand that the notes, etc., be handed over to him, and if it suits his purpose read them out to the court.

I was giving evidence in an important case concerning the age of a boy, whose title as heir to a large fortune was in dispute. One item among the exhibits was an X-ray plate which the counsel on my side was anxious not to produce until a later stage in the trial. The opposing counsel evidently suspected that we were keeping something up our sleeve, and endeavoured to corner me by asking the judge that all the papers connected with my evidence should be placed on the table. The judge agreed to the request, and I complied. With an air of triumph counsel rose and said: 'Now, sir, it is a fact that all the papers, memoranda, notes and books connected with your evidence are on the table in front of you.' I replied in the affirmative, and the case proceeded. Later in the day I referred to the X-ray plate. In a moment counsel was on his feet, indignantly demanding why I was referring to something that was not on the table. I quietly turned to the judge and said: 'My Lord, the learned counsel is endeavouring to prove that glass is paper'. In the laughter that ensued, counsel sat down in a rage, and the point was dropped.

It is often a good plan to ask opposing counsel to explain his question in detail, or in precise medical

terms. He has been tutored up by the doctor on his side to ask the question, but is seldom able to go into detail himself. A barrister was once asking me questions on spinal disease, questions that were difficult to answer on account of their lack of precision. My hesitating answers were construed as ignorance, and counsel was preparing to push home his attack when I turned and said: 'Do your questions refer to the spinal cord or the spinal column?' He was quite unaware of the distinction between the two categories of symptoms, and at once concluded his cross-examination.

Good repartees between judge and counsel are always refreshing. The following must be one of the most ruthless on record: An English barrister was arguing a case before an elderly judge in the High Court at Calcutta, who was irritable and somewhat doting. Finally he turned to counsel, and said: 'Mr. ——, your pleadings are weak and senile'. Like a flash came the rejoinder: 'My Lord, long association with this court has had its inevitable result'.

Indians love litigation; it is the breath of their nostrils, and they are apt to judge the efficiency of their counsel by his volubility or the number of books he brings into court. I have known a plaintiff who had an absolutely watertight case be so overcome when he saw his opponent's counsel bring a large pile of books into the court-room that he rushed over to the defendant and compromised the case. But while he appreciates barristers who make long speeches in a loud voice, he is not so vehement as an Irishman who, smacking an eminent

K.C. on the back, shouted: 'Fight for me, you divil. I have hired you!'

During the action before Mr. Justice McCardie brought by Sir Michael O'Dwyer, a former Lieut.-Governor of the Punjab, against Sir Sankaran Nair, formerly a judge of the Madras High Court, in respect of libels uttered in the latter's book *Gandhi and Anarchy* as to the so-called Punjab atrocities, which included General O'Dwyer's action at Amritsar, I casually entered the court one day to listen to the evidence. After I had been seated a few minutes one of the court ushers whom I had never seen before came directly up to me and whispered into my ear: 'There will never be a unanimous verdict for Sir Michael.' In reply to my query as to why he made such a remarkable statement, he pointed out a particular juryman, and added 'That man has taken an oath not to give a verdict in favour of the plaintiff'. The usher was right. A majority of eleven for the plaintiff against one for the defendant — on all points. But what a coincidence! How did the usher come to know and why should he have spoken to me, a complete stranger?

The health of the prisoners in Indian jails was at one time far from satisfactory. In order that all sanitary and medical requirements should be carried out in every detail and without delay the executive and medical service was combined under one head or governor known as the Superintendent, an officer of the Indian Medical Service.

Every administrative district has its jail with accommodation up to 600 or 800 prisoners, and every province

has five or six central jails with 2000 or more prisoners. The Agra central jail has accommodation for 2600, with 800 solitary cells. The administrative work is interesting. The dividing up of labour and apportioning of the duties of so large a body of men requires extensive organization.

Some gangs are employed in various sections of the carpet, blanket, duster and rope-making factory, and others in building and repairs, cleaning and cooking, sanitation and gardening.

A seeming anomaly is that most of the warders are prisoners, men who by good conduct and work have obtained remission of sentence marks and been promoted first to the position of watchman and then to warder; later they are entitled to a small allowance as pay, which on release amounts to a nucleus of capital wherewith to make a fresh start. Prison life in India is not accompanied by the sullen hang-dog ever-pervading sense of crime which characterizes the white man's prison. There is little or no consciousness of guilt; the prisoners are better fed, housed and clothed than in their own homes, they take an interest and pride in their work. To some characters the element of discipline is a subconscious but definite attraction. I once discharged a prisoner at 9 a.m. and he was back in the jail at 5.30 p.m. He went straight from the prison across to the European railway quarters, walked into the nearest house and stole a clock. He then hung about, making no attempt to escape when re-arrested.

Next morning I talked the matter over with him, asking his reason. He frankly admitted that he could not face life outside with all its uncertainties, that in jail he was well looked after, that he had regular work in which

he was interested, and he felt lost without the discipline and regular life. Hence the sequel.

The grinding of corn is done by hand and is one of the forms of hard labour. The mill consists of two heavy circular stones, the upper having an aperture into which the grain is poured, and a vertical handle. The lower stone is set in a round masonry pedestal, on either side of which a prisoner stands, one pulling and the other pushing on the handle, and thus rotating the mill.

At the end of the day's work the flour is weighed and checked against the amount of grain given out for the day's task. Occasionally a prisoner is found stealing the flour to supplement his rations — he has made up the weight by mixing with the brown flour a corresponding amount of brown soil. This is a serious offence as the soil causes intestinal irritation and bowel complaints among the other prisoners.

Fortunately the culprit is easily detected. A suspect is brought up before the governor with the flour he has ground, a small quantity is dropped into a test tube followed by some chloroform, and behold, the chloroform immediately separates the flour from the mud, the latter dropping to the bottom of the test tube and the former rising to the top. Not the least interesting part of the test is to watch the bewildered expression on the face of the prisoner at the immediate disclosure of his guilt.

Indian prisoners are adepts at getting round rules and regulations and smuggling forbidden articles into a jail.

A brother-officer over a period of some months was perplexed as to a considerable quantity of tobacco that

was getting into his jail. Every precaution was taken; prisoners employed on the outside gang were searched when returning at night, and extra guards were put on the walls to intercept possible parcels thrown over by sympathetic friends outside, but all to no avail.

One morning in the jail garden a prisoner approached the governor and said: 'Sahib! I can tell you how the tobacco is getting into the jail'. The governor replied: 'If you can give me definite information I will remit your sentence by at least six months'. Imagine my friend's surprise when the prisoner replied: 'Well, Sahib! you are bringing it in yourself!'

A central jail covers so large an area that it is necessary for the governor, especially in the hottest months, to bring a pony inside to ride round the many enclosures and gardens. As mentioned before, there is an outside gang who work in his garden and stables and cleaning up round the outside walls. One or two members of this outside gang had been in the habit of removing the stuffing from the governor's saddle and replacing it with tobacco. While my friend was doing his office work, the pony was led away to a quiet corner, the tobacco removed and a stuffing of grass substituted.

Just think of the daily amusement of the prisoners seeing the governor sitting on the tobacco, to detect the entrance of which he was expending so much time and energy!

Some habitual prisoners when they know that arrest is imminent pack a pouch at the back of the throat with two-anna pieces (small silver coins about the size of a

threepenny bit), one on each side behind the tonsil. With these coins they bribe the jail warders. The pouches are gradually formed by working a heavy disc of metal at the back of the throat. This calls for much perseverance on their part.

One morning, having a batch of newly admitted prisoners on parade before me, I noticed one man who was suspiciously prominent behind the angle of the jaws, and walking up to him I gave the questionable swellings a prod with my finger. The man's mouth was instantly full of two-anna pieces.

He tried to obey my order to eject the coins from his mouth, but in the excitement of the moment took a deep breath, and sucked one of them into his larynx. His breathing was at first little interfered with, but when I went on to the hospital I took him with me in my car. In hospital all attempts to remove the coin by the mouth failed, and, swelling of the air passage having set in, it was necessary to give air by opening the windpipe.

Subsequently it became necessary for me to divide the larynx from top to bottom. Even when the larynx was thus completely laid open, I had some difficulty in the extraction of the coin, so firmly had it become embedded as the result of the swelling. Before dividing the larynx I had carefully made transverse marks on it in order to get perfect adaptation of the vocal cords when the organ was stitched together. The man made a perfect recovery, but for the first five or six weeks he was somewhat hoarse.

Carpet-making is one of the many forms of labour in prisons. The weaving factory of the Agra central jail has a world-wide reputation; many of the carpets in Bucking-

ham Palace and the fine carpets in Government House at Lucknow were made there, also that wonderful silk masterpiece in the South Kensington Museum. Many of the palaces of Europe have been carpeted from the central jail at Agra, and before the war, two or three orders were executed every year for the Kaiser and the Emperor of Austria.

It is not work that is quickly learnt, and a prisoner must have a long sentence to qualify for this education. The weaving-sheds have long rows of looms, with carpets of every shade and hue, gradually creeping up the loom at the rate of an inch per day, for such is the daily task. Here is a rug of six feet and on the opposite loom a giant of sixty feet.

Remarkable to relate, the men who are weaving do not know the pattern. One overseer sits in front of the carpet and chants: 'Three black, Four blue, Six green'. The rows of brown bodies squatting behind the carpet lift their arms, pull down the threads from balls suspended above, and tie them in, cutting the thread with a peculiar semicircular knife which lies in the palm of the hand, leaving the fingers free. Every time a pattern is called out, 'Eight yellow, Two cream!' back comes the answering chant from the weavers: 'As thou sayest, let it be done!'

In a large weaving-shed with several carpets in the making the uproar is bewildering, but the Asiatic has an ear wonderfully tuned to the intonation of his own gang-leader, and does not become confused or make a mistake.

There are no jail rules or regulations in any way antagonistic to the prisoners' religion and caste, which are strictly observed. Look for example at that low building

in the centre — the cook-house. On one side are great copper cauldrons bubbling and steaming with the produce of the garden, for all prisoners are largely fed on vegetables; on the opposite side are row on row of hot griddle plates, on which the chappaties or flat unleavened bread cakes are cooked. The cooks sitting in front, each with a pair of special tongs, turn the cakes with remarkable dexterity, cooking them to a fraction of a turn. In order to observe caste only Brahmins are employed within the precincts of the cook-house. There is a low wall up to which the governor can go, to see that the food is good and properly cooked, but not beyond lest his shadow fall on the food and defile it. The floor is covered with a mixture of cow-dung and mud. This is clean, but the shadow of the white man is filthy!

It was at the time of my taking up jail work that the system of identification by finger-prints was officially introduced, although the method had been discovered in India by Sir W. Herschal and had been used by him in Bengal for identifying illiterate persons since 1877.

This innovation much perturbed the prisoners from an unfounded fear that it might in some way transgress their caste and religious principles and not so much from the fact that it is without doubt the only absolute and infallible method of identification.

The system depends on the fact that while skin ridges may be seen over the whole surface of the palms and soles, but on no other part of the body, it is only on the terminations of the fingers and toes that the ridges are arranged in well-defined patterns of loops, arches and whorls or

composites of these. The ridges are consistent from birth to death, and in the smallest structure and detail are never the same on any two fingers, so that finger-prints are absolutely individual.

They are of special use in India in the case of pardah or zenana ladies whose faces can only be uncovered in the presence of their husbands, and of Mohammedan pilgrims to Mecca; and they prevent false impersonation in the lower grades of government pensioners.

A finger-print may be accidentally left at the scene of a crime. A man in my district named Man Singh was charged with murder. The only evidence against him was that he had been seen the previous evening in the victim's house. Next morning lying beside the murdered man was a brass pot on which was a finger-print in blood. This was proved to correspond with the impression of Man Singh's right thumb and on this evidence he was convicted and executed.

It is now claimed that finger-print characteristics determine the racial or ancestral group to which individuals belong, that inherited tendencies can be traced, and even the sane distinguished from the insane.

Other methods of identification such as likeness of features are most unreliable. The notorious criminal, Charles Peace, could so disguise his features by contorting his face that he would go up and converse, unrecognized, with detectives who had seen him before.

Moles or birthmarks in certain cases may be valuable evidence of identification as with the claimant Arthur Orton in the famous Tichborne case. In the trial of Crippen a scar on a portion of abdominal skin was an

important factor in the identification of the remains as being those of the missing woman Belle Elmore.

The relation of crime and insanity is often a difficult problem. A woman was sent to me by the sessions judge of Agra to be kept under observation as to her mental condition. She was charged with murder. I felt confident she was insane, but there were no symptoms by which I could go into the witness-box and swear the fact.

Week after week passed and the court frequently asked for my evidence, to which I replied by asking for a further adjournment. Then suddenly one evening the woman attacked a wardress and nearly killed the unfortunate woman, and from that time she remained furiously insane.

In addition to my other duties at Agra I had superintending charge of an asylum with 1200 inmates. In one section there were 110 men, all of whom had committed murder. Some of these unfortunate people were very dangerous, constantly assaulting the warders. They were unutterably filthy in their habits, impossible to keep clean or clothed. Is it right to keep such people alive year after year when incurable? Surely it would be more humane to them and their keepers to let them pass peacefully away in their sleep.

A case once came to my notice of a European inmate who whenever given a cigarette, of which he was very fond, would retire to his bed, cover himself with the bedclothes and quietly smoke. I think he did it with the idea of conserving the cigarette as long as possible. The warders had been warned that he was never to be left alone for a minute when smoking, but one evening in

searching the patient before locking him in his cell for the night the attendants failed to find a cigarette and match, with fatal results, for when the cell was opened in the morning, only charred remains were lying on the bed. The degree of cremation was remarkable, a fact I could only ascribe to the slow combustion of the wool mattress. The warders were of course severely punished for this negligence, but it must be remembered that many insane persons are extremely cunning and clever at concealing articles.

As regards punishments, much nonsense has been written and talked about flogging. Jail is no punishment for many criminals, certainly not for the habitual offender in India. I do not advocate flogging for a number of offences, but there are crimes for which it should more frequently be given, such as brutal assaults and robbery with violence. It is the only real deterrent. Never once have I had to sentence a man to be flogged a second time, and I know that this is the experience of many. As regards capital punishment, while I have suffered in mind while carrying out this sentence, I consider it absolutely essential for the protection of society.

There have been some executions, of course, which have moved me more deeply than others. There were two prisoners to be hanged the same morning: one was a poor old man who had been so injured in a village riot that it had been necessary for me to amputate his right arm at the shoulder joint. Two men had been killed in this riot but the evidence did not clearly in my opinion associate their deaths with any direct act of the prisoner, and I

was confident of a reprieve at the last minute. The other prisoner was a young brute who had attacked some women while bathing, with a sword, and taken all their jewellery. While in court under trial, he had suddenly turned round, seized the sword which was being exhibited in court and killed the policeman who was guarding him in the dock. He was known to belong to a dangerous band of desperadoes who had threatened to rescue their comrade from the gallows at the last minute, and in view of this threat the number of military police to be present at the execution was to be doubled. It was a standing order that the local telegraph office was kept open the night before executions in the event of a last moment reprieve. About 5 a.m., two hours before the appointed time, to my relief a telegram arrived, but imagine my consternation to find on opening it that the reprieve was for the young ruffian and not for the old man. There was nothing to be done. Orders had to be and were carried out, but some months later, when going on leave to the seat of government, I was determined to find out how this remarkable decision had been brought about. I discovered that a new Judicial Under-Secretary had recently taken over charge, and with much energy had written such a long report that an over-worked governor had thought there must be some grounds and had granted a reprieve!

How differently do persons and races react to this supreme ordeal. The Pathan, the border tribesman, holding life of little moment, meets his end with the utmost calm, while other prisoners may be almost blue and paralysed with fear. In the course of my life I have been compelled by duty to do many things that have

revolted me, but there is one thing I have been spared, and that is to execute a woman. Twice it has nearly fallen to my lot but providentially I escaped.

The following must surely be a unique frame of mind in which to meet death. One dreary morning the grim little procession had wound its way from the condemned cell to the scaffold and it was apparent that there was something on the prisoner's mind, but he made no comment; I had gone through the painful ordeal of asking him if he wished to make a will, carefully checking all his marks of identification and then reading out the death warrant.

Standing on the fatal trap, he said: 'Please, Sahib, wait a minute!' I replied, 'Impossible', but there was such a look of pleading in his eyes that I could not resist. 'Well, what is it?' 'Sahib! In the village of the Ramnagar, there is a Bania (merchant or moneylender) named Ram Lal. He owes me a rupee (one shilling and fourpence). Sahib! You will get that rupee from him, you promise me?' I replied, 'I will give your family a rupee'. 'No, no! Sahib! You will get that rupee from the Bania.' 'Yes, yes! I will, I promise.'

My hand fell, the signal for pulling the bolt, and all was over.

To us it is impossible to conceive a mentality that in the last seconds of life could concentrate on one shilling and fourpence, unless perhaps it were to mitigate the needs of a family impoverished by the loss of its bread-winner.

But what troubled this prisoner was the thought that unless I complied with his request the Bania would be

'one up' on what was no doubt a life-long account of exaction.

Speaking of executions, there is one other I must touch on if only to illustrate the cruelty that a civilized nation could perpetrate in the name of justice, and to plead that all murders should not be placed in one category, but that a man who kills in a fit of blind passion on the spur of the moment should not be condemned to suffer the same penalty as the slow poisoner with his atrocious cruelty and malice aforethought.

It was a bright crisp early morning at the important frontier station of Peshawar, with that invigorating sense that the cold weather gives in Northern India. All the garrison was on parade. For what? Was a sudden raid from the tribesmen of the surrounding country expected on this strategic centre? No! It was to witness the execution of a smart young lad from Warwickshire who, driven to desperation by the continued bullying of a brutal sergeant, had at last lost all control and in a fit of blind fury turned and shot his tormentor on the range.

The troops were drawn up to form three sides of a square outside the cemetery wall, with the specially erected gallows in the centre. The procession approached from the guard-room with the regimental band in front playing 'The Dead March from Saul'. The place of execution could be reached by proceeding down one side of the cemetery, but no, the agony must be prolonged as an exemplary measure. So tramp, tramp — the procession marches in slow time round the three sides. One's blood boils at such brutality, but we have not as yet drained the uttermost dregs, for look! — what is that long

black object carried directly in front of the prisoner? A coffin! — his coffin! And the condemned man? This fine British lad has the face of a stoic; he means to play the man to the last. Let us hope his thoughts are far away from this dreadful scene. Perhaps he is thinking of his parents at home, or of a little thatched cottage nestling under a hill surrounded with all the beauty of Warwickshire's autumnal tints.

"'Tention!' The word of command rings out to the troops, who stiffen into rigid ranks; the band stops its awful dirge, and the voice of the chaplain is heard: 'I am the resurrection and the life, saith the Lord: he that believeth in me, though he were dead, yet shall he be alive . . .'

At last the steps to the gallows are reached. The prisoner mounts them with a firm tread and on the trap brings his heels together with a click as if on parade. There is a smile on his face now. He has conquered! His indomitable pluck has withstood the awful strain.

'Man that is born of woman hath a short time to live . . . In the midst of life we are in death . . .'

Thud! There is a creaking of the straining rope. This was not humanity! Was it justice?

CHAPTER V

CASTE AND RELIGION

IT will always be a matter of difficulty for those who have not lived in India to understand the enormous influence which caste and religion exert on the people. Individuals of every community are constantly subject to three influences, social environment, religion, and government. These forces mould the whole life of men, but in no part of the world, probably, have the two former such predominance as in India, where the whole Hindu social system is ruled and regulated by the peculiar iron-bound institution 'caste'.

Accident of birth determines for all time how a man shall live and have his being, how he must eat, drink, dress and marry, all in accordance with the rules of his caste.

Caste was instituted by the law-giver, Manu, who has been called the Moses of Hindu Law. His statutes were drawn up in Sanskrit about the year 100 A.D. They laid down the rules for purifications, religious ceremonies, the sacrifice of human beings and animals, and for suttee or the burning of widows. These ordinances, drawn up some two thousand years ago, are the same which rule in detail the social and family life of all Hindus to-day, and which form the basis of Hindu law as administered by British Courts of Justice in India, and, on appeal, by the Privy Council in England.

In spite of the changing conditions of time down

through the centuries, these laws remain unchanged and without the addition of new statutes. Suttee, or the burning of a widow or widows on the funeral pyre of the husband, was absolutely abolished by English law in the year 1830, and severe penalties were instituted for anyone aiding or abetting the crime. The British authorities even to-day have to be alert to prevent its being occasionally attempted. One asks oneself whether this was a wise reform. We have replaced the quick agony of the funeral pyre by lingering years of degradation, shame and neglect, to say nothing in many cases of gross ill-treatment. This is no small matter, as there are over twenty million Hindu widows and over a third of a million under the age of fifteen years, and the Hindu character is such that if British rule ceased to-day suttee would be revived to-morrow.

Three points are clear in regard to caste: first that the system was invented with the object of glorifying the Brahmins, and secondly of preserving pure descent; thirdly, occupations were to be hereditary, the nature of the occupation determining the position in the caste scale in accordance with the dignity of each calling.

As regards classification, the most ancient division is into four main castes. First, the Brahmins, or priesthood, believed to have issued from the head of Brahma, the soul of the universe. Second, the *kshatriyas*, or men in military service, issuing from the arms of Brahma. Third, the *Vaisyas*, agriculturists and traders, issuing from the thighs of Brahma. Fourth, the *sudra*, the lowest caste, which is not allowed to take part in the sacrifices or the reading of the Vedas, the Holy Books, and whose duties are

to serve the other three castes known as the 'Twice Born'.

The term 'Twice-Born' comes from the ceremony by which a boy is invested with the Sacred Thread, and which marks the commencement of his spiritual life. The Sacred Thread is a thin cord of three or more loose strands, cotton for a Brahmin, and wool or hemp for the other two main castes; it is worn across the left shoulder to the right hip, always next the body.

Each of the four main castes is subdivided into many others, the numbers varying in the different provinces. In one province there are over two hundred major groups of Brahmins, but the *sudra* caste is divided into the largest number of sub-castes, and is the most numerous of the four principal castes. The *sudra* form the great mass of the Hindu populace, and, added to the 'Untouchables', they represent at least nine-tenths of the whole. The census in 1901 recognized 2378 castes apart from minor and fluctuating sub-divisions.

The 'Untouchables' number about 60,000,000 out of the 270,000,000 Hindus. They defile a Brahmin, and may not approach him even up to a distance of sixty-four feet; when they see a Brahmin they must either leave the road, entering the fields, or else utter a warning cry, and they are not allowed to pass down the street of a high caste quarter of a village, and — even more inhumane, especially in a tropical country — they may not draw water from the village well. The word 'pariah', which is applied to them, comes from *paraiyan*, the labouring caste of the extreme south of India, and unless one has lived in the country it is impossible to understand the odium and humiliation of the term.

It has always appeared to me that the desire to humiliate another person is the cruellest and most contemptible trait imaginable, and yet the caste system makes it a ruling principle of life amongst an otherwise kindly people, as the Hindus undoubtedly are.

Caste, like a kind of trade union, is self-governing; it enforces principally the marriage laws, the kinds of food that may be taken, and occupation. Whilst the extreme penalty for non-observance in former times was death, it is now excommunication, which means that no man will marry an outcast's daughter, or have any social or domestic intercourse with him.

In practice Manu's laws regarding marriage lead to many difficulties, and they have been largely responsible for the crime of female infanticide, as the higher a man's sub-caste, the greater the difficulty of finding a husband for his daughter.

As an unmarried daughter is a disgrace to the family, a father kills many of his female children to save their souls from the Hindu Hell, and himself and his family from being out-casted. I shall never forget my surprise — and at first my indignation, until I realized their point of view — when all the Indian officers of the regiment presented themselves at my bungalow after the birth of my eldest daughter to condole with me on the catastrophe!

Caste ordinance in the upper three castes also compels child marriage, for should a girl reach maturity before marriage she is degraded to the caste of *Sudra*.[1] Manu's statutes prescribe that a man of thirty years shall marry

[1] It is not clear how this notion arose, but once it became a social law no father would incur the risk of this degradation.

a girl of twelve and a man of twenty-four a girl of eight; in some cases girls are married as young as four years old.

Child marriage is thought to purify the race. Only the sacrament of marriage clears a woman's soul of the blemish of original sin and brings about the salvation of her father. She reaches her zenith on bearing a son, who carries on the family worship and performs the funeral rites of his father. These funeral rites are of paramount importance, as, in accordance with Hindu tradition, if a man does not leave a son to perform his obsequies he will be deprived of happiness in the next world. Therefore, when a Brahmin has no male issue, either owing to the early death of his sons or to his failure to beget a son, he is compelled by the rules of his caste to adopt one, in order that, at least in form, he may fulfil the great debt to his ancestors, namely the propagation of a direct line of posterity.

Among the many other observances that the natural or adopted son has to perform at his father's funeral is to walk three times round the pyre, sprinkling water on it from an earthen vessel which he carries on his shoulder and which he finally breaks on the head of the deceased. A torch is then handed to him and he sets alight the four corners of the sandalwood pyre.

This act formally constitutes him the dead man's heir and is the key to the Hindu law of inheritance, the power to make wills not being recognized in Manu law.

Caste observances further compel a high caste man to keep his wife in purdah, while they forbid him to marry a widow or to allow a widow in his family to marry; he

may not eat with men of lower caste, or even accept water when travelling except from men of certain castes. In times of famine men will die rather than accept food from a low caste man. The questions of occupation and work are also defined.

The caste system has often been condemned in recent years by high-minded Hindus.

An eminent Hindu judge has expressed the opinion that caste 'is responsible for a degradation of humanity of which no parallel can be found in slavery, ancient or modern, and stands in the way of social, economic and political progress, and is at the root of a good many of the Hindu, Mohammedan, Brahmin and non-Brahmin problems'.

On the other hand Mr. Gandhi says: 'The caste system is inherent in human nature and Hinduism has simply reduced it to a science. It does attach by birth. A man cannot change his caste by choice. Prohibition against inter-marriage and inter-dining is essential for a rapid evolution of the soul.'

There can be no defence, one feels, for the custom of infant marriage as practised in Bengal, or for that of perpetual widowhood, but more rational views are adopted in some parts of India as among the Jats of the Punjab, who consider that the ban on widow marriage is not an essential part of caste organization.

Apart from those paralysing effects which are so obvious, the great evil of caste lies in the fact that it is in direct opposition to national thought and national responsibility. Nationalism depends upon the consolidation of the units or classes of a country into a concrete

whole, cemented together by the sense of common interests and common ideals. And this is where caste law fails, forbidding as it does the inter-marriage of the various classes and sections of the people, and their mixing together in social intercourse.

While there are three great religions of India, Hinduism, Mohammedanism and Buddhism, the latter does not enter into the political problem, being now practically confined to Burma and Ladak. Christians number only just over four million, and Sikhs about three million. So that the dominant factor is Hindu versus Moslem in proportion of about two hundred and fifty million of the former to seventy million of the latter, the smaller number of Moslems being counterbalanced by their more aggressive and warlike character.

These two religions offer a complete antithesis. Mohammedanism is the worship of one God, the confession of faith in one book, the Koran, — a worship without idols or symbols, recognizing that all men are equal without caste distinctions or prejudices. It is clean cut and strictly defined, allowing no compromise with other faiths. It is Semitic and has the stamp of a conquering power, a world religion.

On the other hand Hinduism is the worship of many gods and idols and is full of mystic rites and gross superstitions. It is ever ready to absorb other rituals and to introduce other gods among its own divinities.

While it is true that in some parts of India, Hindus and Moslems live in friendly relationship, and even take some part in each other's festivals and ceremonies, yet in the majority of towns and country districts, these opposing

forces face one another like two contending armies, ever ready on the least provocation to resort to violence, the result being serious conflicts and loss of life.

At Agra I was often a witness of this kind of rioting during the Moharrum, a Mohammedan festival of mourning. Sitting in their houses the Moslems make out of split bamboo and tissue paper certain structures called *tazias* representing the tombs of the prophets. On a given day these *tazias* are brought outside the houses and placed in the road, preparatory to a general procession through the streets of the city or town to the cemeteries outside, where the *tazias* are buried.

If trouble is brewing, a brick not infrequently comes hurtling through the air, thrown from the top of a Hindu house, and lands in the middle of the *tazia*. Furious rioting immediately results.

Should this danger be averted and the procession started, the Mohammedan bearers carrying the *tazias* on their shoulders will at times gradually raise them higher and higher, until they scrape the peepul trees — rather like our poplar — so sacred to Hindus. This again is a cause of rioting. Then, as the procession approaches a Hindu temple, a Hindu band concealed inside it strikes up some lively air as the mourners approach, causing further trouble.

The passions of the two contending forces are often so inflamed that fierce fighting may continue for many days, and I have known it necessary to employ a force of nearly 3000 troops before a Moharrum procession could be safely escorted out of a large city like Agra.

To illustrate how entirely this is a question between

the two rival religions and has nothing to do with the British administration, one morning during the height of the rioting in Agra I left the police headquarters in the city on the way to the hospital. I was alone and unescorted, and when riding down a very narrow street I suddenly heard a great commotion ahead and about 200 Mohammedan butchers appeared, coming directly towards me. They were in a frenzy of fanatical excitement, having just killed some Hindu merchants, and they were carrying the blood-stained weapons in their hands. I was not going to retreat and rode quietly through the centre of the throng, being greeted with quite friendly exclamations of 'Salaam, Sahib!' But the moment I passed the crowd I turned down a side street and galloped round to warn the troops and police to cut them off and prevent further bloodshed.

The worship of animals by Hindus has often been commented on as one of the lowest forms of idolatry, but it is better comprehended when we consider the foundations on which all idolatrous religions are based, namely self-interest and fear. The Egyptians, so advanced in the arts and sciences, worshipped the bull Apis, the crocodile and the snake, either on account of the good they hoped to derive or the harm they feared.

There is good reason for the Hindus to regard the bull and cow with such veneration — stone images of them are found in almost every temple, particularly those dedicated to the God Siva — for all Indian agriculture depends on these animals, and without their help ploughing would be impossible and there would be no milk, such an important article of Hindu diet.

The great reverence shown to the monkey is probably due to his likeness to man, not only in appearance, but in many of his habits. A large part of the Ramayana, the favourite epic of the Hindus, is devoted to valiant monkey soldiers led by their general, the god Rama.

Snake worship owes its origin to man's natural fear of these reptiles. The worshippers search for their holes and place before them offerings of milk, bananas, or other food that they are likely to fancy. Hindus have been known to keep deadly snakes in their houses for years, feeding and petting them.

There is always great difficulty in dealing with any reform or improvement in India. Some years ago the government made a determined effort to diminish the number of poisonous snakes by offering a reward for every one brought in to the local magistrate. After a time an enormous increase in the number of snakes was noted, and it was then found that the people were actually breeding them! And this in a country where the number of people killed annually by snakes and wild animals amounts sometimes to over 25,000! Again, between plague epidemics there was the most strenuous opposition and obstruction to the killing of rats, 'for', said the Hindus, 'the rats dying warn us that plague is coming'. But they would not see that the so-called warning was too late, and that the rat fleas had by then escaped from their former host and were already inoculating the deadly bacillus into human blood.

Many people do not realize that India means British India and the Native States. British India is ruled by the British administration, the Native States by hereditary

Princes, whose titles are Maharaja or Raja in the case of Hindu and Sikh rulers, and Nizam or Nawab in the case of Moslem sovereigns, but as a matter of fact the supreme Moslem title of Nizam is held only by the ruler of Hyderabad State.

These States have definite boundaries dividing one from another and from British India; they are not however limited to one part of the country, but are intricately intermixed with British territory and other States. They may in fact form a remarkable mosaic, as for example in the case of Tonk, a comparatively small state which is divided up into several parts one of which is as far as 300 miles from its capital. A Hindu ruler may govern a population which is mainly Moslem, and a Moslem Prince reign over a majority of Hindu subjects.

Of the five hundred and sixty-two States some are quite small, scarcely larger than an English parish, varying in size, up to the largest, Hyderabad, which has the same area as Italy. The population of the Native States is about 80,000,000, and the area 40 per cent of the whole area of the Indian Empire, i.e. about 1,900,000 square miles.

These hereditary Princes administer their territories, making their civil and criminal laws, appointing their own civil and military services, the latter up to a strength of eight or nine regiments, maintaining their finances by levying taxes and customs duties.

The majority of the rulers are progressive, developing the resources of the States, turning desert into fertile land by irrigation schemes and good administration, being fully alive to the needs and welfare of their subjects. Some have instituted High Courts modelled on the

British system and adopting the Indian Penal Code. A few have introduced a modified form of Legislative Council, but the powers of these Councils are at present only consultative. On the other hand, there are a minority of rulers, especially of some of the smaller and more isolated States, who appear to have little interest in the welfare of their subjects, inclining to a despotic rule. Others, neglecting their sovereign duties, live away from their dominions for long periods.

Internationally, the Native States hold the same position in the League of Nations as does British India, the All India delegation including a ruling Prince. But all external diplomatic and official matters are conducted by the Government of India, which undertakes the security and protection of the State from external attack, both within and from outside India.

In important matters the Princes have the right of direct access to the Viceroy who presides over the Chamber of Princes, which meets annually at Delhi for the consideration of common interests. While this House of Lords has seldom much policy to enact, the States being self-contained, it exercises a beneficent influence in bringing the Princes together under the auspices of the Paramount Power, which tends to moderation and to harmony between them; an important consideration, as the jealousy and rivalry are at times unbounded. Some of the premier Princes so far have not attended the Chamber fearing to cede some point of precedence.

But the usual channel of administration is through the British Resident in each State to the Indian Foreign Office at Delhi. This political officer's duties may be that of

adviser only, on the other hand he may be the virtual ruler, as when the Prince is still a minor and has not yet come to the Gadi (throne) and been formally invested with ruling powers by the Government.

One of the most cherished honours accorded the Princes is a salute of guns on official occasions. The rulers of Hyderabad, Kashmere, Gwalior and Baroda each have a permanent salute of twenty-one guns.

The policy of Great Britain towards the Ruling Princes was clearly defined in Queen Victoria's Proclamation of 1858 which ended: 'We shall respect the rights, dignity and honour of the Native Princes as our own; and we desire that they, as well as our own subjects, should enjoy that prosperity and that social advancement which can only be secured by internal peace and good government.' Therefore there is no interference unless the people are grossly ill-treated by their rulers — for instance, by squandering financial resources; or unless there be grave internal rioting or disturbance. On the other hand, the Government does not hesitate to depose a Prince who is implicated in crime, succession being given to another member of the family, usually the son. The pen with which I am writing at the moment was given me by a Maharani whose husband had been dethroned. With the help of the British Resident she ruled a turbulent State for several years in spite of indifferent health, until her son was of an age to take up the reins of government.

The two Indian potentates who have most occupied the popular imagination in England are the Aga Khan and 'Ranji', or, to give him his full title, His Highness the Maharaja Jam Sahib of Nawanagar.

His Highness the Aga Khan is known in Europe as a keen sportsman and great social personality. In the East, while possessing neither kingdom nor state, he holds a more exalted position and is accorded more veneration from his people than any other Indian Prince, and this by reason of his direct succession from the Prophet Mahomet. From the middle of the eleventh century the home of the family was Persia. Later, after fighting with the Shah of Persia, the family was located in Sindh, until the present Aga Khan made his principal residence in Bombay. He succeeded to his title thirty-three years ago.

'Ranji', who so delighted cricket-goers of the 'nineties with his wonderful batsmanship, was to display many admirable qualities in the administration of his state. All who knew him cannot but regret the manner of the passing of this true supporter of the British administration. It was not a case of ordinary suicide as some would think. It was a case of the strange oriental power of surrendering up life. When he felt himself rebuffed by the Viceroy's interposition during his speech to the Chamber of Princes, a speech embodying all his ideals, 'Ranji' received a mortal blow.

There is another prominent Indian in London to-day whom I may claim as an old friend and neighbour, as we lived for some time side by side in Agra — I refer to the Honourable the Maharajadbiraja Bahadur of Burdwan, O.M. The Maharaja, while not actually a ruling Prince, is a great landowner in Bengal. His liberal principles and versatile attainments — more especially as a writer of prose and poetry — and the many wise reforms

initiated in the Burdwan domains, have won him wide popularity and esteem. His work on the Imperial and other Councils has shown him to be a keen politician and an able debater. He obtained the Indian Order of Merit for a very gallant act in November, 1908. He was on the platform of a meeting with Sir Andrew Fraser, the Lieut.-Governor of Bengal, when suddenly he saw a Bengali youth stand up in the audience and draw a revolver. He immediately realized that instant action was necessary to save the Lieut.-Governor's life. Sir Andrew was a small man and Burdwan is a giant. In a flash, he seized Fraser and swung him round behind his back. It was not perhaps a very dignified position in which to put the ruler of so many millions, but the Maharaja's prompt action unquestionably saved Sir Andrew's life.

CHAPTER VI

DOCTOR AND PATIENT

§ 1

FEW patients and relatives appear to realize what a terrific strain sensitive doctors may go through when dealing with a case on which all their powers of judgment are concentrated in an endeavour to arrive at a well-balanced decision.

Many years ago an unusually healthy-looking girl of nineteen was ushered into my consulting room, and in the course of conversation, asked for a medical certificate that she was fit for employment in a government office. I jokingly remarked that, judging from her robust appearance, there would be little difficulty in granting her request, but that of course a full examination was necessary. A few minutes later I was greatly distressed to discover that she not only had a large fibroid tumour, but that it was evidently of rapid growth. Making an excuse, I asked for an interview with her parents to whom I had to communicate the tragic facts, and to whom I had to say that an early operation was not only advisable but imperative.

A few days later she came into the hospital and I operated. During the operation the bleeding appeared to be slightly more profuse than is usually expected in an abdominal operation of such magnitude, but nothing

aroused my anxiety until the tumour had been successfully removed and everything was ready for the final stage of closing the abdomen. Then blood was found to be oozing from every part of the wound, and nothing had any effect in checking it; everything was done, transfusion was performed and repeated, but still the ooze continued and ultimately proved fatal. Imagine my feelings! This pretty, healthy-looking girl who had walked into my consulting room not seven days before, now lifeless! I was overcome with distress and rushed off to break the news to the parents and endeavour to explain what, up to then, was an inexplicable case. Again imagine my feelings when their first remark was 'Oh, yes, we are all Bleeders'.

Now haemophilia is an hereditary blood disease, transmitted through the females, who are themselves free from the disease in over 95 per cent of cases, but these women are capable of transmitting the disease to the next generation of males. Although rare, it is an hereditary disease, and most families so affected will always know that they are Bleeders, as these people did. The important point for my own conscience was the answer to the question — was I in any degree to blame? Although I have done many thousands of operations, never once, previously, had I come across a 'Bleeder', so rare is the disease. Again, there was the immensely greater rarity of finding the disease in a woman, and the remarkably bad luck of striking a period of activity in the disease, as some patients are quite normal betweentimes, and capable of being operated on without fatal results from haemorrhage. The remissness of the patient

and parents in not telling me was amazing. Whether I was to blame or not, the shock to me was great and a considerable time passed before I succeeded in throwing it off.

Some patients are inconsiderate not only of the doctor but of the interests of other patients.

Once when I was performing an abdominal operation, the matron of the hospital came into the theatre saying that an important member of the Government wished to speak to me on the telephone. I sent back a polite message that I was operating and could not leave the patient, but would call him up the moment the operation was finished. The matron returned in a few moments with a repeated request. Again I refused, again explaining the reason. A third time the matron returned in a state of agitation and said that it was essential for me to go at once to the phone. Thinking that something unusual must have happened, and that my opinion was urgently required, I stopped the operation, clipped the wound together, and went to the phone to hear the following: 'The tonic which you prescribed has cured me, how long shall I go on taking it!'

The telephone wires nearly fused, and I doubt if that gentleman will ever again interrupt an operation.

A doctor has, however, to be always on the alert to recognize what is and what is not an urgent call. If you receive one such as the following: 'Please come immediately, it is most urgent, when can I expect you?' in the majority of cases you will arrive at the house to find that it is something quite trivial, or even of a chronic nature that has been going on for days, or weeks.

One night, after a very hard day, I had just got to sleep

when the telephone bell rang with an urgent message similar to the above. I started immediately and in order to reach my destination had to ride a pony along a narrow mountain path in torrents of rain and pitch darkness. On approaching the house I was surprised to find it brilliantly illuminated, and a dance in full swing; failing to attract attention or gain admission in any other way I at last walked into the ball-room. The lady of the house came forward and said: 'Yes, when I sent for you, my child appeared ill, but she is quite all right now, and it isn't necessary for you to see her.' I withdrew without comment, but my interview with the husband next day was very much to the point.

How different a message of this kind: As I was approaching home one morning for lunch after a long round, a messenger thrust a pencilled note into my hand: 'Next time you are on this hill, and it is convenient, will you please drop in and see me as I have some fever?' It was signed by a forest officer.

Although I had just come from that direction, I turned and galloped back, to find a young forest officer with an extremely heavy infection of pernicious malaria and cerebral symptoms already commencing. But for an immediate injection of quinine into a vein a valuable life would more than probably have been lost, as pernicious malaria is a deadly and rapid disease, especially in a severe infection. In this case I estimated 15 parasites to every hundred red cells or a total number of parasites in the whole blood of the body approximating to the enormous figure of 3,500,000,000,000.

One morning during the second plague epidemic in

Mirzapur I was called urgently to the next bungalow, and went over to find a young Britisher down with the fell disease. On my questioning him as to how he could have caught it, he said that a few days before he had picked up a dead squirrel in the veranda and had carried it out to the garden to bury. This was conclusive evidence, as on looking round the house, two or three more dead squirrels were discovered. The position was a difficult one to face. The patient required careful nursing but no European or Indian nurses were available, and, to make matters more complicated, all the servants had fled panic-stricken. There was nothing to be done except for me to combine the duties of doctor and nurse between my frequent calls to the stricken city, carrying over soup, milk, etc., from my bungalow. On the third morning, after a very restless night, I attended to my patient's wants and then said I was going across to my bungalow for a bath and breakfast. I gave him strict injunctions, as I had always done before, in no circumstances to get out of bed, explaining the great danger of sudden heart-failure from any movement. I returned within an hour but the bed-clothes were turned back and no patient! At once I apprehended the tragedy and entering the bathroom I found him stretched dead upon the floor.

The funeral arrangements were a difficulty. With the help of another Britisher, I succeeded in getting the body into a coffin, but we were on the upper storey and the stairs were too narrow to get the coffin down. Eventually we lowered it with ropes. There was no chaplain available, but all the other Britishers helped me in every way and we read the burial service over this poor fellow.

I returned to my bungalow completely worn out to be told by my wife that two dead squirrels had been found in the veranda. Not a moment was to be lost. We must immediately vacate the house and go into tents in the camping ground in a pleasant grove about half a mile away. The danger to my wife and two young children was enormous. We made the move immediately, taking the barest necessities.

Five days later I woke in the night feeling far from well with a pain in my groin and putting my hand down felt the characteristic swelling of bubonic plague. I was very worried about my wife and children, but knew that my chances of recovery were good if I kept quite quiet on my back. My wife nursed me devotedly, the attack fortunately proved a mild one as I had more than once had plague inoculation, and in a few weeks I was quite well again. My wife and children providentially escaped and within three months we were back again in our bungalow, the epidemic dying out with the onset of the hot weather.

§ II

Generally speaking, a doctor has to depend chiefly upon his knowledge and experience and his reasoning powers, but it is curious to reflect how a flash of intuition will at times come to one's help. One night during the war I received an urgent telephone message to go at once to a certain hospital and operate on an artilleryman, who had been kicked by a horse and had his intestine ruptured. I arrived at the hospital tired beyond words and dazed

for want of sleep. I had been operating all day. The patient, already on the table, was evidently very ill; everything was prepared and the anaesthetist ready to begin. For a moment I hesitated, then asked for a stethoscope, a request received with amazement by those ready to assist me. The stethoscope applied to the lower part of the chest revealed a condition of traumatic pneumonia from the kick. The patient went back to bed and recovery, and I went back to bed and sleep. Had the operation been performed his chance of recovery would have been very slight.

Again. I arrived at a hill station in India in the hot weather for ten days' leave, to hear, on getting there, that a friend of mine was dying of malaria. The doctor in charge said he was very overworked and asked whether I would stay the night with the patient. On reaching my friend's house, I found he was evidently in a desperate condition, bleeding from the bowel and other parts, as the result of malignant malaria contracted while shooting in the jungles of Nepal. The night had been most distressing and as he was sinking fast the last rites of the Church were performed. About five in the morning I wandered into the veranda and on into the garden which was perched on a rocky height 6000 feet above the plains below. I turned to the East, and there was a glow of light just rising over the great wall of the Himalayas. Minutes passed, and then the orb of the sun rose over the eternal snows. What a perfect sphere! 'Have I? Yes! That's it, I have solved the problem which will save my friend.' The globules in his blood known as the red corpuscles were all crenated (puckered up) from the lack of fluid,

and unable to absorb the remedy, quinine, which was already circulating in his blood. If means could be devised of restoring power to those globules to absorb fluid, and carrying the quinine within, the deadly parasites would be destroyed. I dashed within the house, strained and boiled two pints of water, and dissolved two teaspoonsful of common table salt and some quinine in the water. The pulse was almost gone, but a vein was successfully opened, and the solution added to the circulation. The pulse improved, the haemorrhage stopped, and the temperature came down; my friend recovered to do more than ten years of useful work.

A case of pure inspiration — associating the two spheres, the sun and the corpuscle.

Some time after this I had been summoned to Lucknow in connection with some administrative work. On my return to my hotel about 6 p.m. on completion, the head of my department suggested a quiet dinner and night's rest before going back to my station, about 250 miles distant, but I said: 'I have a feeling that I am — or shall be — wanted in Agra, and that it is imperative for me to return without delay'. The Inspector-General remonstrated, the last train of the day had gone and I should have an uncomfortable journey. My reply was that I had a strong and unexplainable feeling that my services would be urgently required before it would be possible to return next day. I motored forty-nine miles to Cawnpore whence a fast goods train took me to Tundla. Here my car was waiting to take me the fourteen miles to my bungalow, which was reached at 5.30 a.m. I found that there had been no urgent calls. I went to bed but had been asleep

only about half an hour when the telephone rang. I was wanted urgently to attend to a European lady in labour. I found her in a condition that demanded immediate Caesarian section (delivering by abdominal operation). The result was a grateful mother and two fine boys. Had I delayed my departure from Lucknow three lives would more than probably have been lost.

§ III

A score of other curious incidents crowd in upon my memory as I sit now in my Naples home and muse upon those days in India.

What comically incongruous language people sometimes use in tragic moments!

One morning when I was in an ante-room, quietly thinking out the salient points in the illness of the favourite wife of an Indian Prince, a harsh voice at my elbow suddenly barked out: 'Will she snuff out, will she snuff out?' Turning, I saw the Prince, pale with fear and anxiety, and not for a moment realizing how inappropriate to the occasion was the use of his chance knowledge of a slang expression.

Another instance. Two American friends were travelling round the world. One, very ill, was being nursed by the other. I wanted to know whether the patient was taking nourishment. The reply was memorable: 'Sure! He is sucking it down like a bath exhaust!'

During the latter part of the war, I was called to a military hospital in Agra to operate on a case of appendi-

citis. The case had not been admitted until a considerable time after the onset. The patient's condition was unfavourable, but when the abdomen was opened I saw that there was general peritonitis with gangrene, and the outlook appeared quite hopeless — so hopeless indeed was the prognosis that my assistants urged me not to waste time in stitching up the abdomen when we had so many operations to do and the patient could not survive more than a few hours.

My reply was, 'I have never started an operation that I have not finished, and no exception will be made in this case.'

When the position is desperate, desperate action has to be taken, and I passed a large tube right through the abdomen with the object of drainage.

I was not in that hospital again for six or seven weeks, and one of my first questions on my next visit was, how long my patient had lived. Judge of my surprise and pleasure when told that he was in the next ward progressing favourably and would be fit for discharge in about three weeks.

Approaching his bed with the expectation of receiving a few words of grateful thanks for my part in this all-but miracle, I was met with the following:

'Sir, I have a complaint to make. There is something I am worried about!'

'Well, what is it?'

'Three days before I was taken ill, I bought a new pair of boots out of the quartermaster's stores, price 23s., and now I shan't be able to wear them out!'

If ever a man had passed through the Valley of the Shadow of Death, he had! And to fret over this trifle!

DOCTOR AND PATIENT

In treating Indian patients one constantly experiences great difficulties.

A wealthy Raja came to see me and complained of a severe pain in the head. After an examination I said to him:

'Raja Sahib, you have a bad pain, but in your abdomen, not in your head. Why did you tell me the pain was in your head?'

'Well, Sahib, if I had told you that I had a pain in my stomach you would not have thought it of any importance!'

Then there was the case of a man who had been severely mauled by a leopard, and extensive suppuration having spread all up the leg and thigh, it became necessary to amputate through the hip joint. Some hours later, when driving home, I saw him sitting on a heap of refuse and without a dressing; finding bed irksome, he had crawled out to this heap and removed his bandages. Marvellous to relate he ultimately recovered, thanks to his natural immunity.

On another occasion a man on whom I had operated for cataract in the early morning was found at midday walking about the hot and dusty bazaar without any protection to his eye. Here again, the result was not disastrous, as he was finally discharged with a fair amount of sight.

One afternoon a wealthy *zemindar* (landowner) brought his wife in from the district to consult me. I told him that she was seriously ill, but would in all probability make a speedy recovery if admitted to hospital and operated on without delay.

He retired under the shade of a tree in the hospital garden and appeared to be in deep thought.

At last, somewhat annoyed by the delay, I said to one of my assistants, 'What is he doing?'

'Oh Sahib! he is making a calculation as to which will be the least expensive, to cure this wife or marry another!'

One afternoon I was inspecting a remote branch hospital away out in a jungle village, when a bullock cart drew up, and I was asked to see a patient inside who was very ill. Pulling aside the curtains I was horrified to see a young man with violent spasms, his mouth filled with a copious secretion of viscid saliva, his respirations already catchy. The symptoms, confirmed by the history, left me in no doubt as to the diagnosis — hydrophobia. This poor man had been attacked by a mad wolf about three weeks previously and bitten in the face among other places. Now of all animals the bite of a mad wolf is the most likely to give rabies, and the nearer the part bitten to the brain the greater the danger.

Surely it should be lawful in such a case to give an overdose of morphia and thus end the awful suffering of an absolutely fatal disease.

Indian patients are said to be ungrateful, but that is a statement with which I entirely disagree as my experience is quite the opposite. I may give an instance.

The tribes on the frontier have a playful habit of loading their jezails or muzzle-loading guns with scraps of wire, nails, screws, and any handy oddments of metal, and firing it at their intended victims of blood feud.

A fine young Pathan one morning had been the recipient of this attention, and came into hospital with his right arm completely shattered. Amputation at first appeared the only sane treatment, but I have always had a great dis-

like to amputations, thinking such treatment beneath the aim of modern surgery and not infrequently adopted as the line of least resistance.

Not being overburdened with work at the time I determined to try and save the limb; it was a long and hard struggle, but after four months, while not restored to its original utility, it was at any rate a useful member.

To a Mohammedan, the loss of an arm is a disaster of the first magnitude, as, in accordance with his religious belief, he would be debarred from the joys of heaven.

Shortly after his recovery, I was ordered up to Gilgit, a distance of 400 miles, in medical charge of a convoy taking reserve ammunition to the garrison and several lacs of rupees to the Treasury.

My patient insisted on accompanying me; in vain I protested. 'Mohammed Khan,' I said, 'what is the use of your coming with me? You are cured. There is no food in the desolate country though which we must pass. You will have no shelter from the great heat of the day, or from the intense cold of the night on the high passes.'

'Sahib, I am coming; it is my duty,' he replied. 'You have saved my life and my arm. Who knows? I may have the good fortune to save your life amidst the wild tribes of the country through which we shall be marching.'

No argument was of any avail, and he followed me always close by my side, marching the 400 miles to Gilgit and back again to India when I started with the relieved troops a few days later. And he only left me on my arrival at Sielkot in the Punjab to return to his home on the frontier.

The inhabitants of the tribal country just across our

frontier are a wild and fierce people, and woe betide a woman whose husband thinks she may have been in any way unfaithful, the penalty being the loss of her nose, which he severs with one cut from his sharp dagger.

One such unfortunate presented herself at my hospital and said she had heard that the Sahib could make her a new nose. Oh! Yes, this could be done if she would remain in the hospital for a few weeks.

She eventually went back across the border to her home greatly pleased with her new nose. But there was a tragic sequel, a fortnight later she presented herself again at the hospital, this time minus her right arm, cut off below the elbow. The husband, infuriated at being baffled in his first punishment, had committed this second diabolical act.

The pathetic part was she quite thought the Sahib would be able to make her another right hand and arm, and when I assured her this was impossible, she departed with a considerably modified opinion of my ability, a position I endeavoured somewhat to retrieve by arguing that with a husband of such a temperament it was much better not to provoke him to further acts of mutilation.

Barbarity such as this could never take place in territory under British rule, but there is no jurisdiction over the lawless tribes across the border.

§ IV

No one can live long in India without collecting a few examples of Babu English. Here are some that relieved the occasional tedium of my working hours:

A man wishing to obtain the services of a *dhai*, or wet nurse, for his baby wired:

'Please send milkmaid to milk my female child.'

A boy employed in one of the laboratories at Agra as a washer on a wage of about 12s. a month went on leave, and then requested an extension of leave by wire, for the following reason:

'Cannot leave Mama's landed property.'

An applicant for an appointment in a hospital considering that the usual official termination of a letter,

I have the honour to be,
Sir,
Your most obedient Servant,

was not sufficiently strong, made the following variation:

I have the honour to be
Sir my Lord,
Your most damnable slave.

The following was an application for a vacant post as dispenser:

Honoured and Much Respected Sir,

Your petitioner, been given to understand that a post of Compounder of Medicine is vacant in your saintly service, requests that your sympathy and philanthropic zeal will be lavished upon your Honour's miserable slave, and that the post be given to me in order that permanent labour may support his soul, the staff of life, and my poor family. The said family members number seven female women, and

four masculine, the last of which is still milking the parental mother's chest and is damnably rowdy from pulmonary disaster in his interior belly.

Sir, I am entertaining some skins of hope from your benevolence, and trust your Honour will not throw me to the lowest depth of despair from the highest pinnacle of hope. As regards my qualifications for the above-said post, I would point out that while my interior is empty my outer part presents a very lofty and handsome appearance. Your petitioner has worked in many vicissitudes during the past centuries and was never been robber, fornicator or drinker of wine but always lovable to the aforesaid seven female women.

Sir, by doing justice in my case I shall ever in duty bound pray for your long life and procreativeness,

I have the honour, etc.

The Hakim or native doctor frequently seeks patients by advertisements in the native press.

The following is a good example:

This is to certify that Ram Lal he got anaemia pills very good. I recommend to take to anyone. I used many times that pills, being cured by the grace of the Almighty Creator.

Any gentleman suffering from magic, demons, fairy devils, or fury, or any female who is barren or whom offspring are unduly dying, should attend at my dispensary between 8 a.m. and 11 a.m., when all the aforesaid patients will be cured by blowing on

water, spiting and pronouncing of words by the Grace of Almighty God the Creator.

Asthma and Cough will be cured by me which cannot be cured by any English or Indian Doctors and the King Emperor shall receive the blessings of such cured patients.

I am encouraged by my sanguine hope to record with my unfeigned joy, my competency of oculist. I have valiently performed most effective operations, and so promptly obtained cure with great ease and short time to cherish lustre of eye sight. When invited to attend home for examination and council with view to relieve patients of pain of extending consciousness my fee is twice what it would be in dispensary.

I may end up perhaps with this tale of a quaint little mishap.

When Her Majesty Queen Mary visited Benares, as the Princess of Wales, she was much amused to see a banner stretched across the road along which the royal procession was to pass with the following inscription:

'God Bless the Princess Female.'

At Mirzapur when the Governor of the United Provinces, Sir Anthony Macdonnell, was making an official visit, the people had determined on an enthusiastic welcome and had prepared an arch with the word 'Welcome' in large letters, but the point selected for its erection was hardly palatable to His Honour. It was put up by mistake over the cemetery gate!

§ v

A few axioms by way of conclusion.

However common a disease may be, every example is an individual affair, a case with entirely new and individual points differing just as widely as the personal features and character of the patient. The art of the successful doctor is to balance carefully the position and to adjust his mental attitude and his treatment not only to the needs of each individual patient but also to the environment of that patient, studying him as a whole.

To be successful the doctor must be the stronger man. He must firmly and sympathetically rule his patient. The wisdom of this was recognized by Bismarck, who said: 'My former doctors treated me as I directed them. They carried out my ideas, but Schweninger treats me according to his own views, and therefore will succeed.'

Both doctor and patient require to feel that co-operation is essential.

Personality in the doctor is of tremendous importance.

Concerning treatment, the wise and experienced doctor realizes that nature is the great physician and that compared with her his powers are small.

The younger generation, crammed with theory and wonderful and elaborate tests, rushes in, and, not unnaturally, endeavours to put into practice the knowledge it has acquired. The older and more experienced man knows that nature has set a limit upon his means of treatment, and that to transgress those limits by fussy interference, impeding her beneficent action, will be to the great detriment of his patient.

Nature has curative methods of her own, and has a complete system which she puts into operation for every illness. Consider her methods of dealing with an infection by microbes. She actually manufactures and circulates antitoxins to neutralize the toxins produced by the foreign invasion. We can supplement her action, as, for example, in the case of diphtheria, by giving more antitoxin.

New remedies must be avoided until time and science have tested their value. This warning is of special significance in these days, when thousands and thousands of nostrums are pressed on a too receptive public by unscrupulous advertisement.

The doctor can always render great help even in helpless cases. Do not, by pronouncing Sentence of Death, let a patient suffer the tortures of the condemned, but let your attitude be that of the famous physician Reil, who said: 'My incurable cases have lost their lives, but they have never lost hope.'

CHAPTER VII

ABOUT CANCER

How often the unexpected happens! Within a short space of time two patients consulted me suffering from that dread disease cancer. Now cancer in its first stage is definitely a local disease and can be completely eradicated.

One of them, an elderly man, had consulted me several times previously for a pimple-like growth on the face. I had pressed him strongly to have it removed a couple of years before, as it was then, in my opinion, in a pre-cancerous condition; he had steadily refused. Now, however, he wanted me to operate, as recently it had become irritable and was spreading. I still thought the condition hopeful if a wide and extensive operation were performed. This I proceeded to do, but the disease spread like a forest fire in spite of surgical treatment and radium, and the end was terrible.

The other patient was a man of thirty-four, of whom I had no previous knowledge. He walked into my consulting room one afternoon and complained of a sore throat of some standing. Examination revealed cancer of the tonsil, which had already passed the first stage, as the lymphatic glands in the neck were involved. The patient, perhaps noticing my anxiety, pressed for a full and unrestrained opinion.

I broke it to him as kindly and gently as possible what the condition was, explaining that in my opinion it was

past the stage at which an operation was at all likely to be successful in this region of the body.

Naturally he left me greatly distressed, and I did not see him again for a couple of days, when he returned and told me he had a young wife and a large family entirely dependent on his being able to work. I emphasized the fact that the points of the case all appeared to be against the success of operation, but said that in the circumstances if he wished to take the possible chance I was willing to try. He eagerly agreed.

The growth inside the throat was removed extensively and a period of three weeks was then allowed to elapse, during which I hoped that any stray cancer cells from the growth in the throat would find their way to the lymphatic glands in the neck. Then a carefully planned and detailed operation was done in the neck involving an incision from the ear to the collarbone by which I hoped (if possible) to remove the remaining disease with the glands.

After the operation the wounds healed well and he left hospital, and after a short time he went to another province and I lost touch with him; but I often thought of the case, fully expecting him to return with a recurrence. Eight years passed and then one day I accidentally ran up against him at a railway station. He was in perfect health and very grateful to me for my share in his remarkable recovery.

And now a few words which may lead to the better understanding of a disease which causes so much fear and mental anguish.[1]

[1] My friend Herbert Casson in his fascinating book, *Getting Over Difficulties*, writes: 'Thousands of business men worry because they fear they have cancer or some other incurable disease. John D. Rockefeller has always had a horror of cancer, but he is now 94 years old and in good health.'

The average man has some knowledge of the causes and nature of such diseases as tuberculosis, diphtheria and typhoid fever. It is, therefore, all the more remarkable that so prevalent and serious a malady as cancer should be the exception. I base these remarks on the ignorance displayed in articles and letters written by otherwise well-informed people which appear almost daily in our leading papers.

While our knowledge of the nature and to some extent the cause of cancer has advanced enormously in recent years, the ultimate solution is still veiled. Ronald Ross, on discovering that the mosquito was the carrier of the deadly poison of malaria, was inspired and privileged to write this fine thanksgiving:

This day relenting God,
Hath placed within my hand,
A wonderous thing; and God
Be praised. At His command,

Seeking His secret deeds
With tears and toiling breath,
I find thy cunning seeds,
O million-murdering Death.

I know this little thing
A myriad men will save,
O Death, where is thy sting?
Thy Victory, O Grave?

To some indefatigable student of cancer it may some day be given to claim similar success in kindred vein.

Although the goal has not yet been reached, our knowledge of cancer is such that we are able to control it in many effective ways, and it is a mistake to accept the scourge as incurable.

To understand the nature of cancer, it is essential to know that the bodies of animals and plants are built up of small masses of jelly-like substances called cells. These cells are, of course, so small that they are quite invisible to the naked eye, but they can be clearly examined in detail under the microscope.

The body is built up by the division and growth of these minute cells, which are arranged in definite strata or layers to form tissues like the skin and mucous membranes, and are organized into the different parts and organs of our bodies.

Now as long as these cells go on multiplying and performing each their allotted task as good citizens in the economic organization of the body, that body is normal and healthy. They have obeyed, and are obeying, the established laws of that body. Their obedience is called Somatic (pertaining to the body) Co-ordination.

But whenever any cells cease to obey this law of Somatic Co-ordination and pass out of its controlling influence, then these revolutionary cells become a cancer.

This point naturally raises the questions:

1. What is the cause of this revolution?
2. Why cannot it be cured and stamped out?

These two points embrace the whole problem of cancer, and we will now endeavour to see how far we are able to proceed along the road leading to solution. Now, as to

what is causing the revolution? The parasitic theory has been frequently and strongly advanced. Its supporters have endeavoured to prove that cancer is due to a definite microbe, but this theory is incompatible with many well-known facts connected with cancer. Numerous micro-organisms have been found in malignant growths, but of none of those described up to the present can it be said that they have been found in all cancers, and not in any other condition.

The most probable explanation is that, under the action of a stimulus, the cells are no longer subject to the co-ordinating influence which under normal conditions regulates the relationship between the different groups of cells forming the body, the result being that cancer cells live parasitically upon the organisms.

The question that naturally follows, is: Are there any definitely known stimuli or causes of cancer? The answer is unquestionably in the affirmative.

It is known to follow upon prolonged and more or less continuous irritation and inflammation, such as the irritation to the tongue of a jagged tooth or the hot stem of a pipe constantly in the same position on the lip, more especially if these parts have been irritated by the poison of syphilis.

Indians, generally, are remarkably free from cancer. There is an interesting form of the disease in Kashmere as the result of direct and repeated irritation of the skin. This is called Kangra Cancer. The Kangra is an earthenware vessel enclosed in a basket case, containing charcoal embers. This is carried by Kashmiries during the winter under the voluminous woollen cloak or chogha and next

to the bare skin. It can be easily understood that this results in repeated burns and irritation of the skin in a circumscribed area. Contrast this with the fact that deformities from severe burn scars are very common among the people of Northern India, but the development of cancer in these scars is very rare, the irritation not being repeated.

A noteworthy example of the effect of continued and severe irritation as a cause of the disease came before me when I was in charge of the Mirzapur district. Here, among the people generally, cancer is practically unknown, but there was an aboriginal tribe in the south of the district who chewed tobacco. Not content with this stimulant, they added lime, with the result that severe cancer of the mouth and tongue was quite common among them.

'Chimney-sweep's cancer' appears to be due to the creases of the skin being habitually filled with carbon. Minute particles of carbon make their way between, and often into, the cells; this acts as a stimulus causing heavy proliferation.

Persons who work continuously with X-rays, unless protected with lead aprons and rubber gloves, develop cancer in the unprotected parts which are subjected to intense irritation. Coal-tar derivatives are known to contain certain constituents which are provocative of cancer. These constituents have been isolated and inoculated into mice (mice suffer from cancer equally with man). The inoculations produce rapidly growing tumours.

That cancer should follow upon prolonged inflammation and irritation is compatible with the view that the cells

have passed out of Somatic Co-ordination. The frequency with which cancer occurs in any tissue is proportionate to the frequency of multiplication of the cells in that tissue or part of the body under normal conditions.

It is common in skin and mucous membranes, where the cells normally go on dividing throughout the life of the organism. Primary cancer of nervous tissues is unknown. The cells of the nervous system do not multiply.

Furthermore, the age at which cancer becomes common is that when all prolification is becoming less active, so that an unusual stimulus produces an abnormal prolification which is more likely to result in the cells passing out of Somatic Co-ordination.

We now pass to the point which will interest the majority of my readers in that it affects everybody, and that is the question of diet in its relation to cancer. In this connection I cannot do better than quote Major General Sir Robert McCarrison, I.M.S., who has done such wonderful work in studying diet and its influence upon health and freedom from disease.

Speaking of the people of Hunza, among whom he worked for nine years, Sir Robert McCarrison says:

> They are great fruit-eaters, especially of apricots and mulberries. They use apricots and mulberries in both the fresh and the dry state, drying sufficient of their rich harvest for use throughout the autumn and winter months. Dried mulberries are mixed with their wholemeal flour and made into cakes, which form their staple article of diet. Meat is a luxury used only on special occasions. These people

are unsurpassed by any Indian race in perfection of physique; they are long-lived, vigorous in youth and age, endowed with nervous systems of notable stability, and capable of great endurance. To see a man of this race throw off his scanty garments, and plunge into a glacier-fed river in the middle of winter, is to realize that enforced restriction to the unsophisticated foods of Nature — provided these be of the right kind — is no bar to the attainment of perfection of physique.

No doubt the climate of Hunza — situated as the state is below the Pamirs and at an altitude of 7,000 to 8,000 feet above sea level — is conducive to health and vigour, which its inhabitants enjoy, but their enjoyment of these things is mainly due to their moderate use of the right kinds of food. Their resistance to infection is remarkable: anthrax, for example, does no more than produce a malignant pustule, while septicaemia, its common consequence, is unknown.

Gastro-intestinal complaints, dyspepsias, gastric and duodenal ulcers, colitis and appendicitis, are as uncommon as they are frequent elsewhere. Even cancer is so rare that in nine years' practice I never came across a case of it!

Compare this with the marked prevalence of cancer among the poor Europeans in India and the Eurasian population, suffering from constant vitamin starvation, on a diet of white bread, tinned fish and meat, and canned fruit.

We now come to the second point:

Why cannot cancer be cured and stamped out?

To answer this question it is first necessary to review the three stages of the disease:

(1) When the cells first start their revolution and pass out of Somatic Co-ordination they cause no symptoms at all; it is only when the mass of cells is sufficiently large to form a tumour, which, by pressure and interference with the blood-supply, causes pain, that attention is drawn to the fact that something is amiss.

(2) The next or second stage is when cancer cells extend from the primary seat of revolution along the lymphatic or drainage tubes of the body to the lymphatic glands.

(3) The third and last stage of cancer is when cancer cells are spread all over the body, being conveyed by the blood stream, and produce a number of centres of growth in almost any organ or part.

The cure of cancer — as you will have gathered — depends on the stage to which the disease has advanced. In the first stage, if in an accessible part of the body, it is easily removed by operation, being localized; unfortunately it is not frequently recognized in that stage, partly because patients delay in coming for advice and partly owing to the difficulty in making a diagnosis of cancer. This question of diagnosis is sometimes a matter of extreme intricacy, even when a portion of the growth has been removed, and is actually being examined under the microscope.

In the second stage cancer can be cured by operation, but it is necessary to remove not only the growth, but all the drainage tubes from the growth, and all the filters or lymphatic glands into which cancer cells have passed. The difficulty then is to be certain that all the malignant cells have been removed. Two other methods of treatment, however, now come to our aid, these are X-rays and radium.

Radium is only one link in a chain of substances ranging from uranium to lead, which are continually disintegrating but at varying rates; from uranium with a half life period of five billion years, to radium A, which loses half its strength in three minutes. As radium transforms at a convenient rate it is most suitable for treatment. This decomposition is accompanied by the emission of rays. Radium produces three kinds, called Alpha, Beta, Gamma; the two former are material particles and are little used. Gamma rays, on the other hand, are high frequency ether vibrations similar to those of light, and have the same velocity, viz., 186,300 miles per second; they are also extremely penetrating, and therefore of great use in treatment.

The rationale of X-ray and radium treatment may be summed up briefly as an endeavour to kill the revolutionary cells, which are of a low grade and therefore susceptible to the influence of the rays. The more the revolutionary cells of a cancer deviate from the normal cells from which they were derived, the greater is the destructive action of the rays, for it must be remembered that the action of the rays in treatment is a selective action, against the rudimentary cancer cells, and effected without

damage to the normal, more highly developed, law-abiding cells of the body, if given by experts trained to the exact dosage.

In the third or last stage the case is utterly hopeless as the cells have been sown broadcast by the blood stream, and many tumours are growing all over the body, and frequently in inaccessible parts.

An apology is due for the introduction of a subject of this kind, but the general lack of knowledge and the misunderstanding on the subject so often leads to disaster that I feel my brief résumé may possibly do some good.

CHAPTER VIII

WITH THE GERMAN CROWN PRINCE

1911-1912

We were off to a shooting camp in the south of theMirzapur district, the large British and German staff left behind at Allahabad, so that the jungle should be disturbed as little as possible; with a large camp the traffic necessary for bringing up supplies is constant and noisy.

The Prince was attended by Count Zu Dohna, a general commanding a division of Prussian Guards; Count Finck von Finckenstein, a civilian and personal friend of the Prince, and Count Widermann, a typical Prussian; Sir John Hewett, the Governor of the United Provinces of Agra Oudh; Lieut.-Col. Gordon, his Private Secretary; Mr. Wyndham, the Executive Officer of the district, and myself.

The special train arrived at Ahraura Road, not far from the sacred city of Benares, in the middle of the night, and we made an early start next morning for Ahraura town, which lies thirteen miles to the south, and on the direct road to Chopan where our camp was pitched. Two or three miles beyond Ahraura we came to the end of the intensive cultivation which is characteristic of this part of the Ganges valley, and the road enters rocky hilly country which extends to the extreme south of the district

and on into the Central Provinces; the district is there bordered by Bengal on the east, Sarguja State on the south, and the Maharaja of Rewa territory on the west.

One party of *shikaries*[1] were in the jungle some eighteen miles west of Ahraura and at 10 a.m. news was received that a tiger had killed and a start was at once made along an unmetalled road for fifteen miles, where the cars had to be abandoned for elephants which took the party three miles through the jungle to the foot of the hill. The last half mile up this hill to the *machans*[2] was made quietly on foot.

The arrangement of the guns in this beat was with the Prince's *machan* well advanced in front of the other *machans*, and a line of stops on both the right and left converging on to it in a V. Behind the Prince's *machan* at some distance were four other *machans* in line, so placed that the tiger could be shot if he came on past the first *machan* after being wounded.

As the jungle was not thick and the trees were low and stunted, it was feared that the tiger would spot the first *machan* as he was beaten up towards it, and might break out sideways through the stops and so get out of the beat, without giving the chance of a shot.

Soon after the beat began two bears passed within a few yards of the Prince and gave easy shots, but the Prince did not fire as the order was for tiger only, and it was not then certain that the tiger had left the 'kill' and was therefore not in the beat. So, unfortunately, we had drawn a blank for that day, and there was nothing else to do but start our long trek back to Ahraura, and then

[1] *Shikaries* = gamekeepers. [2] *Machans* = shooting platforms.

on again for another thirty-seven miles over a rough and hilly road to the camp at Chopan.

Next morning news was brought in that a tiger had killed about sixteen miles north of our camp and at 10.30 a.m. a start was made on elephants to the spot. The beat lay on the other side of the Rehand river.

This river flows from Sarguja State past Gaharwargarn where the fort of the Raja of Singrauli is situated. An ancestor of the Raja did good service for the British government during the early years of the nineteenth century and his descendant holds not only property in British India, but also a fief from the Rewa State.

The tiger was in the beat but unfortunately broke through the stops, thus missing the Prince's *machan*. It was eventually shot by Count Finck von Finckenstein. It was a fine male measuring 9 ft. 7 in.

On the following day a 'kill' was reported somewhere near the Mangeshwar hill which is about three miles to the north-west of the camp. The beat was a very long one and the tiger tried the stops on both sides several times, but eventually went straight up to the Crown Prince's *machan* and fell to a single shot. He was a large tiger measuring 9 ft. 10½ in.

Throughout his tour the Crown Prince showed great interest in children, and he was particularly amused to see a small boy driving a huge herd of fierce buffaloes, which would at any moment attack a white man, but which were easily restrained by this little urchin. He photographed a little girl of six or seven years carrying on her hip a younger brother not much smaller than herself.

The Crown Prince had great powers of observation

and pointed out that the small boys who joined in the beat would not have been allowed to take part in such a dangerous sport in either England or Germany. It was emphasized that the risk was small so long as the occupants of the *machans* reserved their fire until the tiger was so close that there was no danger of his breaking back on the line of beaters in the event of his being wounded.

The Prince was also interested in the primitive life of a rural people, their villages and crops, inquiring into their habits and superstitions, which are many.

On the following day a drive of thirty miles brought us to a jungle in which a tiger and cub had killed, but they were not in the beat, having apparently been disturbed by a pack of wild dogs, which always disturb a silent hunter like the tiger. A couple of general beats were then organized and during these I was in a machan with the Prince. Shortly after the beat had begun a fine sambhar galloped past us, the Prince fired and it dropped apparently stone dead and I told the Prince that I could see the stag lying stretched out a short distance behind us. The beat continued and out came two large leopard cubs, which the Prince shot with a right and left. Then a boar charged across our front and went up to the next *machan* where it was shot by General Zu Dohna. Pig cannot be ridden in these broken hilly tracks and are therefore legitimate game for the rifle.

The moment the beat was over the Prince dropped from the tree and ran into the bushes in the direction the two leopard cubs had taken. I followed, entreating him not to do so, as if not dead they would certainly attack him and even the slightest scratch would have resulted in

septic poisoning. When we found them, they were fortunately both dead and the Prince insisted on carrying them out into the open himself.

We next turned to the back of the *machan* to examine the fine head of the sambhar, but not a sign of the beast.

The ground was all cut up where he fell and a little further on we discovered his trail where he retreated into the jungle. What must have happened — and I have known it happen before — was that the Prince's bullet struck the sambhar at the base of an antler, stunning him for a time, but before the beat was over he recovered and made off.

Late one evening I was returning alone with the Prince from a beat, he driving his powerful Benz car at great speed on a non-metalled road. Suddenly, perhaps two hundred yards ahead, a large boar walked out of the jungle and stood still in the middle of the road.

As a rule a boar of this size is afraid of nothing and stands his ground. I gave an involuntary shout as the Prince steered directly at him, with a vision of this huge beast jammed under our radiator, and the car turning a somersault in mid-air.

Whether the Prince swerved at the last moment or the beast moved, I am not sure, but we just scraped by with a crumpled mudguard.

A couple of days later news arrived that another tiger had 'killed' in the beat where the Crown Prince had shot one two days before, but the 'kill' had not been dragged and the tiger was outside the beat. Later the shikaries tracked him over the hills to the east.

That afternoon two of the Prince's staff accompanied me down the river in search of crocodile with which the Sone abounds in these parts. Rounding a bend of the river, four large crocodiles were seen lying out on a sandbank basking in the sun about 700 yards away. After carefully looking them over with my glasses, I decided that number three from us was the largest, and therefore suggested that this should be the one aimed at.

When we had stalked sufficiently near, the Count fired, and I could see with my glasses had put in a good shot, as there was a big hole behind the shoulder, but I thought there was something unusual, as the beast never twitched his tail, as crocodiles always do, even when the shot is immediately fatal. The other three had of course instantly slipped into the water and disappeared.

Not wishing to take any risks another shot was fired, also with good effect, but still no movement; on going up to the brute, which was nineteen feet long, it was at once apparent that it had been dead some time, and when we turned him over his throat was found to be cut from one side to the other.

Imagine my feelings! Out of four crocodile, I had suggested shooting the one already dead, and to make the position more awkward, there was no explanation. Furthermore, up to that time some members of the suite had not distinguished themselves by brilliant shooting. Some fishermen were seen casting their nets from a boat about a mile farther down the river, and I walked down to interview them in search of a solution.

'Oh, yes, Sahib! We were out fishing early this morning and that *magar* (crocodile) got into one of our nets

which was torn to pieces, but he got so tied up that we were able to kill him with an axe, cut his throat and tow him ashore.' The news preceded us to camp, and the Prince, treating the incident as a great joke, came out to meet us and to congratulate the Count on shooting a dead crocodile.

A few days later I took another member of the German staff up the river and then up a backwater, where we discovered a large crocodile lying on the opposite low bank. We were on a small cliff and the General put in a fine shot between the brute's eyes, killing it instantly, but this time the tail twitched. The only way of crossing the stream to where it lay was by means of a tree trunk, roughly hollowed as a dug-out — a most precarious craft.

Before embarking I warned the General on no account to get out when we reached the opposite bank until I had made certain of the safety of the landing, as these rivers are full of quicksands. As we got into the dug-out he picked up a flat stone and dropped it into the bottom of the boat; the moment the boat touched the opposite bank he threw it overboard, and before I could stop him stepped after it, instantly sinking above his waist.

The position was most alarming. How was I to prevent his sinking, and if able to do so I knew it would be impossible to get him out without help; manœuvring the dug-out broadside on and getting my arms under his armpits I was able to prevent his sinking any deeper. Eventually our plight was seen from a village in the distance and men arrived with poles which they placed across from the bank enabling us to get the General out.

This *magar* when cut open contained masses of long

hair and over thirty bangles and other female ornaments. He had evidently eaten a number of women, waiting for his victims in shallow water and when they came down to fill their earthen pots he would seize them by leg or arm, drag them under and when drowned commence his meal.

January 25 was the last day in camp, and while the Crown Prince went off for a beat to the west of the road in the vicinity of Ahraura, I took the German staff back to the special train at Ahraura Road. Before leaving camp, the chief of our staff handed me over the secret code of the British Foreign Office, with strict injunctions not to let it out of my sight. It was kept in a battered and disreputable old tin box, a most unlikely-looking receptacle for such a vital record. I carefully hid the box under the seat of the car, and little did our guests realize that they were sitting on a book for a brief perusal of which the German Secret Service had recently offered £1,000,000. All the same, it was a relief when the journey was over without a breakdown of the car, and the code was safely hidden in my bed in the special train.

The Prince on this his last day, with straight shooting and good luck, got a tigress, a male cub 7 ft. 3 in. and a female cub 7 ft. 1 in. in this beat. The tigress charged first up to the *machan* followed by the male cub twenty-five minutes later, and then the other cub ten minutes after. The advantage of the straight shooting was that if the first two had not been killed by single shots it was more than probable that the third beast would have broken out of the beat.

It was also good luck to find three tigers in one beat,

although I believe it is a fact that the Maharaja of Benares once slew four tigers in a single beat in the eastern part of this district.

Time flies when one is tiger shooting and it was after 5.30 p.m. when the party reached the special train, and as there was an official dinner and ball that night in Allahabad in honour of the Prince, we had to hustle.

The result of the week's shoot was: two tigers, one tigress, two tiger cubs, two leopard cubs, two bears, three boar and a crocodile — excluding the one previously deceased!

The Prince then stayed some days in Allahabad playing polo, and pig-sticking. While devoted to the former game, he was not so taken with the sport of pig-sticking as with shooting.

There was a severe outbreak of plague in Benares, the next place to be visited, and Government were anxious to run no risk of infection to the Prince, and considered the advisability of cancelling this part of the tour.

I was therefore ordered to Benares to investigate and report. Having been through two big epidemics in the city of Mirzapur and having suffered from the disease myself in the second epidemic, I was well aware of its dangers. On arrival in Benares I found the outbreak to be serious and that there had been cases comparatively near the royal camp, but it was bubonic plague, which is a common disease of rats in sub-tropical regions and is only spread from rat to man by the common rat-flea. Europeans are rarely infected with plague, but when this does occur the infection has been conveyed in all the European cases I have treated from fleas in squirrels. Rats are rare

in well-kept bungalows, but squirrels are a frequent inhabitant of the verandas.

The only point on which I was doubtful was the question of the Prince's voyage down the Ganges, this being the vantage place from which to view the panorama of the temples and ghats along the water front. The tour was to be made in the State barge of the Maharaja of Benares, which was rowed by about sixty oarsmen. There was certainly a risk that some of these men's clothing might possibly carry infected fleas. How then was this to be got over? The following plan was hit on. The men were to have new uniforms for the occasion; these were disinfected and put on board the royal barge which was anchored in mid-stream. The entire crew were then to be assembled on the bank an hour before the Prince's arrival, and then to be made to strip and swim out to the barge.

Carefully summing up all these elaborate precautions, I considered the risk infinitesimal and reported accordingly to the Government. If there had been a serious risk this part of the programme would have been abandoned, but it is no small matter to dislocate a royal tour, involving as it does the accommodation of hundreds of people in camp.

Three camps were necessary, with tents, furniture, etc., complete in every detail; when one camp was left, number two was ready to be occupied and number three was already at the next halting place. There were tents not only for the large staff, but for their secretaries, clerks and servants, the whole requiring a number of special trains and an army of workmen to strike and repitch.

The Prince's stay in Benares was comparatively short. After seeing some of the temples and the ruins of Sarnath and paying an official visit to His Highness the Maharaja of Benares, he proceeded to Lucknow.

The architecture of the capital of Oudh is of a later date than that of Agra and Delhi and while in certain respects the buildings are imposing they are often tawdry in detail.

The Prince was greatly interested from a soldier's point of view in the ruins of the Residency, as the history of the great sieges of the world contains no more brilliant episode than its defence. The entrenchments surrounding this building, the headquarters of Sir Henry Lawrence, one of the most far-seeing of Indian statesmen, covered sixty acres, enclosing a number of detached buildings and outhouses, linked together by trenches and palisades; from a military point the position was indefensible.

Yet 1720 men, of whom 712 were loyal native troops and 153 civilian volunteers, the remainder being regular British troops, held at bay 6000 trained mutinous Indians backed up by a great mob from Lucknow city.

The siege lasted for 87 days and when raised the garrison had been reduced to 982, and many of these were sick and wounded. During all this time the enemy's guns and musketry had poured in a constant fire on the defences from a distance in some parts of only 50 yards. Throughout the siege the British flag flew from the tower of the Residency and has never been struck even to this day.

The Prince was taken round by Mr. Hilton, one of the last survivors of the defence, who pointed out the posts

of special interest, and the points of mining and countermining which were such a feature of the fighting.

Much adverse comment was made with regard to the Prince's behaviour during his stay in Lucknow, more especially as to his not attending the evening party given in his honour by the Talaquadars of Oudh. I may as well give the facts. The Crown Prince hated official functions, balls, dinners and receptions; he was fond of the simple life in the jungle, shooting and playing polo.

From his bearing at the official ball at Government House, Lucknow, it was apparent to anyone who understood his dislike of ceremony that he had almost reached the limit of endurance without a respite. During the course of the evening he asked me how far it was to Allahabad. I replied that it was about 180 miles; but, not for a moment suspecting that he intended to make the journey, I did not add that the road was only metalled for the first two-thirds of the distance.

The following morning the Crown Prince got up early, but did not, as usual, breakfast with the staff. He then went out to inspect the Residency, accompanied by two members of the staff and Mr. Hilton. Passing the rest of us in the hall he said he would not require anyone until after lunch.

On returning from the Residency he went directly upstairs to his room and then, apparently, down a back staircase to the garden, passing through the triple cordon of sentries, British and Indian infantry, and police, to his powerful Benz car, which was waiting at a side gate with only a German orderly.

From that moment he completely disappeared and no news was heard until 8.30 p.m. and this in spite of the fact that special trains were dispatched down each of the lines radiating from Lucknow, and motor cars, mounted orderlies and police in all directions were endeavouring to find some trace.

On the Prince saying that he would not want any of us until after lunch, I had gone out to make some purchases, and the first intimation I had of his sudden disappearance was when an orderly rode up as I was coming out of a shop, and said he had been directed to find and ask me to return immediately to Government House.

In the hall a note which had been found on the Prince's writing table was shown me. It ran: 'Dear Lady ——. Would you kindly excuse me; I am going out for a motor drive and will be back by the late afternoon?'

The position was disconcerting, both for the German and the British staffs, as there was a strict order that his Imperial Highness was always to be attended by both a British and German officer. Added to this, the fact that while the Prince was a skilful driver, he was a reckless one, and not afraid of taking risks. Moreover, he had no knowledge of the language of the country, should he have got into difficulties!

As one search party after another returned and reported 'no news', the German staff became more and more anxious, and it was not until after dinner, just before the Government House party, including the British and German staffs, were leaving for the Talaquadars' party, that a telegram was received from Allahabad announcing the Prince's arrival there, and his immediate return by a

train which would reach Lucknow at 6.30 next morning.

In the absence of any further information, a feeling of strong disapproval prevailed regarding the Prince's behaviour and it was decided by both the German and British staffs that no member of either should meet his train on its arrival in Lucknow.

The position of the Governor of the Province was most unpleasant; the Talaquadars of Oudh had gone to great expense and trouble in giving this regal reception, and the Crown Prince's absence in the circumstances was not easy to excuse.

On arrival next morning, he was attended from the station by a junior police officer only, and went direct to his room, not appearing until about a quarter of an hour after the whole party were at breakfast in the dining-room of Government House. He then entered the room unattended, and walking straight up to the Governor's table, apologized profoundly for the incident before everyone.

The Prince afterwards explained that on leaving Government House he had motored down the Allahabad road until the metalled part terminated and his car was unable to proceed. He then continued alone on foot until a river was reached, when he succeeded in being ferried across by making signs to the ferryman; but in the village on the opposite bank he was delayed by having to stop and render first aid to an old woman who had been knocked down by a cow and had her head badly cut.

Eventually he reached the railway and after a wait got a train into Allahabad. The object of his visit was to see a Burmese Princess, who had attracted his fancy, but the effort was not a great success, as he told me afterwards

that he only had a few minutes with the lady, and the refreshment offered to a famished man was ginger beer and seed cake. He then went to the railway station and asked the stationmaster for a special train back to Lucknow, stating who he was. His request was apparently met with much ridicule. 'What, you His Imperial Highness the Crown Prince! Why, he has a staff of over 140 and travels in the Viceroy's special train!'

Thus rebuffed, the Prince went to a first-class carriage on the ordinary Lucknow train and found a compartment with three junior British officers occupying the two lower and one of the upper berths. He told them who he was and was at once offered one of the lower berths and some bedding. He refused the offer of the lower berth, and took the unoccupied upper one and accepted a razai or Indian quilt, the night being very cold. During the night the other occupants of the compartment woke up and seeing no Crown Prince, searched round and found him huddled up in a corner of the bathroom, tightly wrapped round with the razai and endeavouring to keep warm.

The Prince, it appeared, leaving Lucknow about 10.30 a.m. in a car which did over 70 miles an hour, calculated on reaching Allahabad in three hours. He intended staying there one hour, and allowed another three hours for the return journey. This would have brought him back at 5.30 in ample time for the evening entertainment, and that this was his intention is borne out by the note, which he left on his writing table.

Moreover, this unfortunate incident having taken place, he did his best to make amends by apologizing to his host, the Governor of the Province, in the

presence of the whole British and German staffs.

Reports of complaints regarding the Prince's insufficient care of polo ponies and lack of appreciation and thanks to those who lent them found currency at the time in one or two of the home papers, but I think they were entirely without foundation. While I was not playing, I knew all the players, and I heard no unfriendly comment from them.

The Prince was at this time, whatever may have been reported in the German press after his return to Germany, very Anglophile. He was quite frank and outspoken on the subject, and the chief of the German staff more than once hinted that it might lead to difficulties. One morning at breakfast we were discussing nationality. Having asked if I was an Irishman he went on to say, 'You must remember that I am half Scottish!' Whereupon someone remarked, 'I suppose, sir, you go back to the Stuarts for that.'

When speaking to some members of the German staff, I once heard him say, 'I much prefer to be with British officers.' Sports and games strongly appealed to him and this was doubtless the reason. The press, during the War, made him out to be a weakling and of defective intelligence. This is certainly not the case. He is well built and muscular, well above the average mentally and with an excellent knowledge of English, which, with two exceptions, could not have been said of his staff.

He was undoubtedly impulsive, but this was partly due to a very natural reaction. He had previously been kept always in leading strings by the Kaiser and never given any freedom. He said to me once, 'This is the first time I have known what it is to be my own master.' He was then twenty-nine years of age with two sons.

In many ways he was an extraordinary mixture. He seemed devoted to children and hardly ever missed an opportunity of speaking to one. He had an eye for a pretty woman, but many of the tales current at the time on this subject were gross exaggerations. He had considerable knowledge of Red Cross work and was always anxious to put this knowledge into practice, and more than once insisted on personally attending to Indians who had been hurt. As a sportsman he showed aptitude and pluck and was a good shot.

Towards his staff he was always very considerate and thoughtful, never keeping them hanging about unnecessarily.

From Lucknow the Prince went to Calcutta as the guest of the Viceroy, Lord Hardinge, at Government House, and then on to another tiger-shoot in the tidal forests of the Sundarbans.

Herr von Treutler, the chief of the German staff, was taken very ill in Lucknow, and when the Prince left for Calcutta had not sufficiently recovered to accompany him, so I received orders to remain behind with him and I subsequently accompanied him to Calcutta. Von Treutler was one of Germany's senior ambassadors, and had, I believe, also been Foreign Minister. To illustrate the fear with which the German staff regarded the Kaiser and apparently even more so the Kaiserin the following is an example: On the journey down to Calcutta when the train stopped at Dinapore I got out of the saloon and purchased copies of the daily papers for von Treutler, to pass the time. He settled himself in an easy chair but after a few minutes suddenly sprang up with tears in his eyes and

wringing his hands exclaimed: 'What will the Kaisarin do to me?' I could not imagine what had happened, and after a pause he added: 'Oh dear! The Prince did not go to Sunday morning service in Calcutta yesterday.'

When he was well enough, we went for long drives together, and he was intensely interesting on the question of the possibility of war between England and Germany. His point of view was that while England was stronger at sea and Germany on land, it would be suicidal for the two nations to fight, as no matter which ultimately won, both countries would be so weakened and their resources so reduced, that they would both be a prey to the other European powers.

While the Germans constantly spoke of the time when they would fight France, I am convinced that their mentality could not visualize a crisis in which England would be ranged on the side of France against Germany, and if for no other reason than that of the close bonds between the two royal families. For whatever may have been the feeling towards King Edward, there was still the strongest possible feeling of respect for Queen Victoria, who was always spoken of as the 'Great Queen!'

Von Treutler knew King Edward well and told several stories of His Majesty's tact and thoughtfulness.

The photograph reproduced facing this page caused great perturbation among the German staff. The Prince, who considered himself not unlike Captain Charrington of the Royals, insisted on changing uniforms, and then being photographed. The Kaiser's displeasure would not be difficult to understand had he seen a photograph of Charrington wearing the Order of the Garter and the Black Eagle!



THE CROWN PRINCE OF GERMANY AND CAPTAIN CHARRINGTON
OF THE ROYALS, HAVING CHANGED UNIFORMS

MUTTRA, 1911

CHAPTER IX

MURDER!

In the evening of November 18th, 1912, when I was reading in my consulting room at Agra, an orderly entered and announced that a Doctor Sahib was in the hall and wished to see me. I sent out my salaams and in came a thick-set man of strong build, above the average height. His forehead was low and his neck short and thick. But my attention was at once fixed on his eyes which were small, shifty and cunning.

He gave his name as Lieut. Clark, Indian Subordinate Medical Department, and requested permission from me as Principal of the Medical School for removal of his wife's body from the mortuary. He stated that his wife had been murdered the previous night and that a post-mortem had been performed that morning. I had already been told by the officer in charge of the medico-legal work that he had just completed an examination of the body of a European woman with terrible injuries, said to have been murdered.

My natural impulse was to offer my sympathy in such a terrible tragedy, but on doing so I was struck by the callousness and indifference with which my condolences were received. Little did I then think that I was standing face to face with probably the most cold-blooded and calculating murderer of modern times.

I rang up the Medical School, gave Clark the necessary

permission and he at once left. He had only been out of the house a few minutes, when the telephone rang and I recognized the voice of the chief of police, which sounded as if something unusual was in the air. He said that he wished to see me at once on an important matter and that he was then leaving for my bungalow.

A few minutes later, he gave me an account of Mrs. Clark's murder, but said that there were points in the case which did not fit in with Clark's story of a midnight robbery, that Clark was known to be on bad terms with his wife, and that his statements as to his movements the previous evening were contradictory.

We then visited together the scene of the murder, Mrs. Clark's bedroom, which was a terrible sight, with ample evidence of the utter savagery and brutality of the deed.

The police then and there arrested Clark, and, armed with a search warrant, went to the house of a Mrs. Fullam, the widow of Mr. Edward Fullam, who had died about a year previously. His death had been certified as due to natural causes.

During the search that followed, the inspector of police accidentally kicked a tin dispatch-box under Mrs. Fullam's bed; this resulted in a most dramatic and damning discovery, for it was found to contain nearly four hundred letters, the majority love-letters written by Mrs. Fullam to Clark and initialed by him.

These letters gave extensive evidence of the plot to murder Mrs. Clark; as well as conclusive proof of the slow poisoning of Fullam over a period of six months, with poison supplied by Clark and administered by Mrs. Fullam, and finally of Fullam's murder by poisoning on

the night of October 10th, 1911, just over thirteen months previously.

In the face of such evidence, denial on the part of the accused would be futile, and it only remained to reconstruct the double murder, exhume Fullam's body, and if possible discover therein traces of the various poisons given by Mrs. Fullam.

We must now consider the four principal figures in this remarkable case: Clark, aged 42, was a member of the Indian Subordinate Medical Department, a branch of the medical service holding subordinate charge under the Royal Army Medical Corps and recruited entirely in India. He had been educated at the Calcutta Medical College, but was not up to the average standard of intelligence, and had had great difficulty in passing his examinations. In character he was held to be cruel, cunning and sensual, and he had been constantly mixed up in love-affairs, for, although unkempt and almost repulsive in appearance, he had a strong attraction for women.

Mrs. Clark, aged 48, was a good, quiet, gentle woman, but with no force of character. She had met Clark when a nurse in the Medical College Hospital, Calcutta, at the time he was endeavouring to pass his examinations. She was an excellent wife and a devoted mother to the three surviving children of the marriage, two sons and a daughter, all of whom gave evidence in the preliminary trial before the magistrate.

Mr. Edward Fullam, aged 44, was a Deputy Examiner in the Military Accounts Department. He was a quiet, religious man, respected by his many friends, fond of

home life, proud of and devoted to his wife, but not entering into her social pleasures.

Mrs. Fullam was aged 36. She had an unpleasingly large mouth and nose, but her brown hair, blue eyes and fair complexion were attractive.

She was well-read and well-educated for her class, with a strong sense of humour but vain to a degree. An excellent mother and devoted to her children. Her mentality is one of the outstanding points of interest in this unique case, and will be fully revealed in the course of its developments.

There were three children of the marriage: Leonard, the eldest; Myrtle, an infant; and Kathleen, aged ten, quick, with a keen sense of observation and an intelligence far beyond her years. One of the most pathetic incidents in this dramatic trial was that Kathleen, while adoring her mother, had to be one of the chief witnesses against her, and had to describe in the witness-box the damning conversation which she overheard when Clark and Mrs. Fullam paid Mrs. Clark's assassins.

The Fullams had been married about fourteen years when Clark was posted to the Station Hospital at Meerut in 1909. Their acquaintance began soon after, and within a short time Clark in his cunning way had laid siege to Mrs. Fullam's heart, and, repellent though he seemed, she fell completely under his influence.

It is strange to reflect that all the suffering involved and the almost inevitable penalty of the gallows might have been avoided, as a confession by both of their adultery could have brought about a divorce at very small cost from the local judge's court at Agra.

In November, 1910, Clark was transferred from Meerut to Delhi. And then commenced the long correspondence which proved the keystone in the evidence. Clark also paid Mrs. Fullam frequent visits at Meerut, the two places being about thirty-eight miles apart. During this time they wrote to one another, on an average, about five times a week, and while Clark's letters to Mrs. Fullam were destroyed by her, from the fear that her husband might discover them, Mrs. Fullam's letters to Clark were not only kept by him, but as a rule were carefully endorsed thus: 'Answered H.L.C. 5.1.11', and tied up in packets.

The reader may well ask what motive prompted Clark to keep this incriminating record, in the absence of which the guilty pair in all probability could never have been brought to justice. Clark had undoubtedly a reason, and from his point of view a good one, which I will show later.

The following are typical extracts from a number of Mrs. Fullam's letters to Clark:

> How boyish and youthful you are, my own darling, to act over me just like a young lover over his first love. I know full well that I am not your first love, Harry darling, but I also know and believe that I am the first one you have ever truly fallen in love with.
>
> Very late in life has true love met you, darling, and to think that poor I have won your heart, and hold you spellbound.
>
> Why can't you give me up for Mabella (Mrs.

Clark)? She came first in your affections my sweetheart.

Fondest and truest love and kisses darling. (Warmest love and the sweetest of kisses) from your own little loving and ever devoted little sweetheart and Bucha.[1]

GUSSIE

From another letter. She has been telling Clark that there is no doubt that she is pregnant:

We have fought and struggled against this, but we cannot fight against God's will and neither do we wish to, what say you, my own darling?

So now you can think when you are playing tennis and enjoying yourself of an evening how your poor little girl is keeping a rough time, feeling so sick and miserably wretched.

Thy way, not mine, O Lord,
However dark it be;
Lead me by Thine own hand,
Choose Thou the path for me.
I dare not choose my lot;
I would not if I might;
Choose Thou for me, my God,
Then shall I walk aright.

These lines are just what my poor sentiments now express, Harry darling, my own precious sweetheart, Bucha, and whatever happens, I leave all to God's Almighty will.

[1] Baby. A pet name. First syllable Buch pronounced like such in English.

The astounding character of this woman! The mixture of profound religious belief and carefully planned adultery and murder!

Then follows a series of letters showing her vanity and suspicious jealousy of Clark's relations with other women, her domestic difficulties and quarrels with her husband over Clark's frequent visits.

Clark had now been transferred to Agra, and in the middle of April he made up his mind to murder Fullam by poisoning, and communicated this decision to Mrs. Fullam both by letter and a visit to Meerut on April 20th; Mrs. Fullam alludes to this in one of her letters:

> In your every letter lately, darling, you hint that the way will soon be smooth and clear for us.

At their meeting they laid their plans by which Mrs. Fullam was to give her husband the poison called 'Tonic Powders', which Clark was to send her regularly by post from Agra.

On Clark's return to Agra she wrote:

> We now start afresh with a bright hope before us, shining like a beacon, our star of hope and comfort.

In letters between April 20th and May 4th, Mrs. Fullam at first describes to Clark at great length how the tonic powders have had a good effect on her husband's health, that he is quite well and strong and that his complexion has changed to a lovely pink, and more than once she complains of an aphrodisiac effect.

Towards the end of this period, when apparently she

had been able to administer three powders in the day, she tells Clark that her husband has had constant stomach trouble, pains in the abdomen, diarrhœa, nausea, vomiting, and weakness, but a couple of days later he had recovered from this and Mrs. Fullam wrote:

> I don't think these powders are having any effect, Bucha. What do you think, lovie? You say they must be given regularly, and then you say you can't administer them to Mrs. Clark as regularly as you would like.

This implies that Clark was at the time endeavouring to murder his wife by the same means.

The correspondence is a mixture of passionate love, hopes and guilty fears. At the same time great disappointment is shown at the slow rate of poisoning and its apparently slight effect.

After May 4th Clark evidently increased the dose, but after a few days Mrs. Fullam again reported that they had little effect beyond making her husband very amorous, and imparting a wonderful effect to his skin.

Dosing with these powders continues until about May 20th, but their repeated failure throws Mrs. Fullam into a state of deep depression and wild jealousy, so much so that Clark went to Meerut and saw her about this date.

Now as to the nature of these powders, Mrs. Fullam in her letters makes frequent reference to their containing five grains each, but they could not have been entirely of arsenic as the fatal dose for an adult may be estimated at from two to three grains.

Clark had evidently spent time in thinking out the dosage

of arsenic and the symptoms of arsenical poisoning, as I found two of his medical books handed over to me with the page turned down at arsenical poisoning and several sections underlined in pencil.

The arsenic must have been mixed with some innocuous substance, probably powdered sugar.

It has often been a matter for speculation why arsenic, which is an indestructible poison and easily detected in the body by chemical analysis post-mortem, should be such a favourite medium of the poisoner of all ages and in every country.

The first and probably the most important reason is that it is tasteless, thus enabling it to be easily mixed with ordinary food; it is more easily procurable also than most poisons as it is so extensively used in commerce. In the East, the symptoms to which it gives rise are less likely to arouse suspicion, as these are the chief symptoms also of the frequent complaints, cholera and tropical diarrhœa. Moreover, the Hindu custom of disposing of their dead by cremation gives the poisoner a strong feeling of security, for when the body has been burnt and the ashes scattered on the surface of a great river like the Ganges there is no proof.

On the other hand if the body is buried there is no reason why arsenic, being a metallic element, should not be discovered later—even after hundreds of years—if the remains have not been disturbed in any way. In this particular case it was easily discovered in Fullam's thigh bone which I removed for the purpose at the post-mortem following his exhumation.

On May 23rd Mrs. Fullam refers to a new poison

called jelapine which Clark had probably sent as the result of her repeated complaints regarding the ineffective tonic powders. The jalapine was twice put by Mrs. Fullam into her husband's tea and sent to him at his office, but on the second occasion it was returned untouched as Fullam said 'There was some bad medicine in it', and added 'this is the second time the tea has tasted bad.'

It is interesting to note Fullam's long-suffering nature. He had had a complete trust and belief in his wife, but his suspicions had been more than once aroused by her persistent friendship with Clark, which had led to arguments and scenes between him and her. It is therefore all the more remarkable that after weeks of gastro-intestinal symptoms, and after having twice refused to drink his tea as it tasted of bad medicine, that he should not have taken definite measures to safeguard his food.

On June 15th Clark again visited Meerut, and unknown to Fullam, he probably left a much stronger dose of arsenic with Mrs. Fullam, because, on the night of the 16th, the unfortunate Fullam was very ill with repeated and violent vomiting and diarrhœa. On the 17th Mrs. Fullam wrote to Clark:

> Harry Darling,
>
> My hubby has been very ill all Friday night since four o'clock, with symptoms of cholera . . . I have been up all night giving him ice, etc. My hubby declares his last mouthful of tea at lunch caused a burning sensation, and he started retching in office. . . . My darling, I can't go to the Post Office this morning for your dearest letter, sweetheart, as I

> can't leave him. . . . They all blame the Masonic dinner on Thursday night, but he himself says the tiffin upset him, darling. You and I know how, I cannot bear to see his suffering, Bucha darling. . . . He is quite weak and prostrate.

When Fullam was so ill on this date he was seen by a doctor friend who lived near, and after Fullam had described his symptoms, especially the scalding pains in the stomach on swallowing the tea, the doctor said, 'If you had any enemies, I should say you were being poisoned with arsenic.'

After this severe attack Fullam's suspicions were evidently aroused, as Mrs. Fullam wrote to Clark to the effect that she now found it difficult to give the powders, as Fullam refused any food prepared by her, and made his own cocoa.

The amazing character of this woman poisoner comes out again in the next letter to Clark, following so closely on the description of the terrible sufferings of her husband — June 28th:

> I give half a tonic powder every day in his Sanatogen, lovie darling, because it lays on top of the white powder [Sanatogen] quite unsuspiciously, and he mixes it up in his teaspoon. . . . I don't think my hubby regards you as an enemy, but as a friend and Masonic brother just the same.

The unfortunate Fullam was now a complete physical wreck and was given short leave to a Hill Station for which he left on the 8th, returning on July 18th. It is

practically certain that the administering of arsenic ceased on July 8th on Fullam's departure from Meerut.

During the eleven weeks of torture, this man exhibited all the classical symptoms from taking arsenic in medicinal and poisonous doses: at first the general tonic effect of improvement in health, with clear complexion and increased sexual desire; then, immediately after the larger doses, nausea, vomiting, and diarrhœa, with scalding pains in the throat and pit of the stomach; subsequently from the excreting of the arsenic through the conjunctivæ, and the lungs, bloodshot eyes, chronic catarrh, and cough; finally the tingling in the hands and feet so characteristic of the inflammation of the nerves of the limbs which is the cause of the paralysis.

During the time that Fullam was away in the hills Clark went to Meerut and stayed there for four days. Fullam on his return discovered the fact and was naturally annoyed. This, combined with her overwhelming passion and strong resolve to be free, urged on Mrs. Fullam to more drastic methods.

She now conceived the idea of administering a mixture to her husband which would result in what would be mistaken for 'heat-stroke'. This idea came to her from accounts in the daily papers of a number of deaths from heat-stroke. Clark at once acted on this plan and told Mrs. Fullam he was preparing it, but before it arrives she writes:

> Let me know by return of post if in the heat-stroke treatment, the face will become perfectly black and distorted and convulsions set in?

Will you please let me know if it will be a very painful death, or will unconsciousness soon intervene? Also my darling, please let me know if I can administer the liquid at dinner or tea-time? You see it will be so hard for me to get a doctor, or anybody to help me at night, whereas broad daylight is so much easier. I only hope that no suspicion will point to me, Harry darling!

The next letter of Mrs. Fullam to Clark said:

You must not attempt to free yourself so soon as next month, as it would look very bad in the eyes of the world, darling, and you have grown-up children, who might notice your anxiety to become a widower as soon as Mrs. Fullam is alone in the world.

On July 27th she writes to Clark:

Your kind and loving letter dated Wednesday 26th together with the small parcel containing the heat-stroke liquid. . . . Oh! Harry darling, it is very bitter in spite of your lime-juice and salt! I thought you said it would be a white colourless liquid, like water, my darling. But it's yellow, thick, sticky and bitter. . . . Now Harry darling, I know you have done your best. So that if it is God's good will, he will make all our efforts come to a successful issue, and if not, then we must part, sweetie darling, and think no more of each other.

We cannot go on very much longer as we are doing, lovie Bucha, as things are getting harder for us, I am sure when he tastes his plate of soup this evening at dinner, he will remark it tastes like bad

medicine, darling, the same as he complained of the jalap. Anyhow, I shall try unless anything happens to prevent me. If I am successful, I shall send you just a line, letting you know the result. I shall not send a wire, as you don't wish it. . . . If we are crowned with success, — but I shall let you know lovie darling.

To-day is an exceptionally hot day, Harry darling, just the exact weather for heat-stroke. I am very glad to know that you are quite well again, my lovie, and I pray God will richly bless you all your life, even if you may never win me after all, sweetie. This is really a crisis in both our lives, my own Bucha darling, and I only wonder how it will end, sweetheart?

Fondest, warmest, truest and never changing love, and many millions of sweetest, loving kisses, from your own true, constant, loving, best beloved and most devoted sweetheart and Bucha darling,

GUSSIE

On July 28th Mrs. Fullam wrote to Clark:

They have taken away my dear hubby to hospital, after a most dreadful night, more like a nightmare. . . .

I feel heart-broken and only wish to die. Would that I had never been born, as I am so wicked.

He recovered to recognize my voice at the head of the bed, though he never saw me. He patted the orderly's cheek and said, 'My dear little girl you have come to see me. How are the kiddies?'

July 29th. . . . but evidently it is God's will to spare my hubby's life and he is not going to die, Bucha darling.

July 30th. . . . many thanks for your kind and most welcome letter of sweet sympathy. . . . I must confess that I do feel very sad and miserable to think I am the cause of so much suffering and expense to one who had never done me any harm in all his or my life, but only loved me tenderly. . . . When my hubby leaves hospital he is going up to Mussoori I think, but he told me this morning he would not go without me and the children . . . This last attempt has been a dead failure . . . So you see everything points plainly that we must part and forget each other, although Heaven knows it will be sore and sorry work.

You don't blame me at all, do you darling? I have been very brave and have done my best but fate wills it otherwise, and we must each do our duty where God has placed us, my Bucha darling. They have diagnosed my hubby's case as heat-stroke, lovie darling, and no one has the slightest suspicion of the truth, my own lovie.

Here, in parenthesis, I should explain that the judicial side to this case consisted of a prolonged inquiry before the magistrate's court at Agra beginning at the end of November and going on for several weeks with repeated adjournments for evidence. And two trials in the Sessions Court of the Allahabad High Court. The first of these

trials in which Mrs. Fullam and Clark were charged with the murder of Mr. Fullam commenced on February 27th, 1913, and lasted three days.

In the second trial which took place on March 10th, 11th, 12th, and 13th there were six accused, the four ruffians whom Clark had hired as the assassins of his wife, and he and Mrs. Fullam were charged with abetting the crime.

The inquiry before the Magistrate's court was a long drawn out ordeal for me. Day after day Clark and I stood almost shoulder to shoulder in the court, he fighting for his life and I on the other hand hunting up all the evidence that would convict him. It was a distressing position to occupy towards a member of my own profession, however unwillingly. In the evenings I met Mr. (now Sir C. Ross) Alston, the leading counsel for the prosecution and discussed the points that had arisen during the day. I also gave evidence at the first trial in Allahabad, my assistant, Dr. Modie, giving evidence at the second trial. The proceedings in the High Court were most dramatic, more especially during poor little Kathleen Fullam's evidence against her mother she loved so dearly, as there can be no question that Mrs. Fullam was an excellent mother. Also when it came out in the course of the evidence that after Mrs. Fullam and Clark had murdered the unfortunate Fullam, they spent the rest of the night together in bed in the same room with Fullam's body, the revelation of such utter callousness reduced the court to complete silence for what appeared to be a number of minutes. Finally, at the conclusion of my evidence, Clark stood up and made a full confession; callous and

without a shadow of regret for all the unspeakable suffering of which he had been the cause, but making, it should be added, every endeavour to take the full responsibility on his own shoulders and to shield his mistress.

Fullam was discharged from hospital on August 14th, but in his wife's opinion this was a mistake on the part of the doctors as there was danger of a relapse, the weather being very hot.

Yes, there was indeed 'danger of relapse', for while there is no documentary evidence in the letters to show that Mrs. Fullam administered a second dose, it was to be made quite clear from the evidence of her little daughter, Kathleen, at the trial that at about 3 p.m. on August 17th her mother gave her father some medicine. After a short interval, he said, 'Oh! Guss, you have given me the wrong medicine'. (He was taking medicine prescribed on his leaving hospital.) Kathleen went on to say, 'My mother replied she did not think so. Father said his throat and tongue were burning and went to his bed asking for water and ice, and I heard him praying "Oh! God have mercy on me!" '

Captain Weston, a retired officer of the I.S.M.D., saw him shortly after, and stated at the trial that he was in a dangerous condition. He added that he sent the patient back to hospital, where he was very ill for several days.

It had now become apparent that Fullam would never again be fit for work, and a Medical Board sitting on September 2nd recorded this opinion and recommended his retirement. He was offered a free passage to England

by troopship, but later, presumably under pressure from his wife, he decided after retirement to live in India.

During this period there were breaks in the correspondence of Mrs. Fullam to Clark, but on September 3rd there is a letter:

> I should never have made such an attempt on his poor life, which has resulted in cruel disappointment and wrecking of his whole nervous system, brain and all.
>
> Sweetheart mine, he can't even sign his pay bill, and so I can get no money this month. . . .
>
> My husband is very ill, he can't walk as you suppose nor can he even sit up but just twitches and jumps, and in the intervals stares like a lunatic.
>
> What a prospect! But I did it, and so I deserve a ruined life and a broken home and no friends and no comforts.

Mrs. Fullam shows at this period that news is reaching her of Clark's other love-affairs. She writes:

> Another thing that has troubled my very soul, and made me bitter towards all the whole world in general darling, is the scandal which from time to time reaches my ears. I don't like to repeat all I hear to you Bucha for you naturally get very angry, and so I have to brave all my troubles alone and in silence which as you say 'eats into the very soul' and makes life so hard to bear. . . .
>
> How you do beg and plead to be reinstated in my tender loving heart, Harry darling! What am I to

> say? But oh, Harry sweetheart, this is all coming, because you have your lawful wife, and I have my hubby.

Then, perhaps to give a fillip to Clark's affection, she adds:

> I am sorry to say that Mr. H. has also fallen in love with me darling.

Fullam was now about to be discharged from hospital and arrangements had been made for the Fullam family to go and live in Dehra Dun, a favourite resort for people of this class on retiring.

But suddenly and surprisingly Fullam himself made the fatal decision of going to Agra. This news was communicated to Clark, who took a bungalow for the family at No. 9, Metcalfe Road, Agra, and made all arrangements. He went to Meerut on October 7th, and accompanied the family to Agra, where they arrived on the morning of the 8th. This shows Fullam had no suspicion of Clark.

We now approach the final scene of this long drawn-out and terrible tragedy. Our knowledge of it comes chiefly from the little child Kathleen, who broke down and cried bitterly on the three occasions when she had to repeat her story in the witness box.

On the evening of October 10th, at the bungalow in Agra, Fullam was given his dinner in the garden, while Clark, Mrs. Fullam and her children dined in the house.

Mrs. Fullam brought her husband's soup and meat dish from the kitchen herself, and there can be no question

that she had again put poison into her husband's food. During his dinner Fullam, feeling unwell, got up and walked into his room, lying down on the bed for the last time. We can visualize this deathbed scene — the still heat of an Indian summer night, the semi-darkness of the bungalow room, and little Kathleen going on tip-toe to the bedside of her father who was conscious and spoke to her. According to her evidence, he said to her, 'I am going, Kathleen dear. Be a good girl, and God will bless you. Give my love to Leonard, and tell him not to fret.'

He then asked, 'Where's mother?'

She replied, 'In the dining-room, shall I go and fetch her?'

He said, 'No dear, I do not want her.'

What a volume of tragedy these seven words convey, for suddenly in his last moments the veil had been torn aside, leaving the unfortunate man face to face with the terrible truth: the wife whom he had loved so well and trusted to the full, was in league with his great friend and brother-Mason to take his life; those two, now together in the next room, were responsible for all his suffering for more than three and a half months.

Yet all he said was: 'No dear, I do not want her.'

A few minutes later, poor little Kathleen again tip-toed to her father's bed. A merciful unconsciousness had now fallen on his mental torture and his pain-racked body.

But Clark was taking no more chances this time.

Kathleen, continuing her evidence, said that she saw

Clark go to a table and prepare a hypodermic injection which he gave to her father. Clark in his evidence in court said that this was a mixture of ether and strychnine given to restore Fullam, but in my opinion it was gelsemium hydrochloride, a very potent poison, a large quantity of which was found subsequently in Clark's possession.

Kathleen, continuing, said that a few minutes later Clark entered the dining-room where Mrs. Fullam was sitting and simply exclaimed 'Gone!'

Clark himself had no authority to sign death certificates, but he made one out and by a cunning ruse he obtained a counter-signature from a superior officer who trusted him.

After the funeral next day, amid hostile murmurings among Fullam's many friends and colleagues in Meerut, the curtain falls on the scene to rise again just thirteen months later.

No less amazing than those which we have seen were some of Mrs. Fullam's remarkable letters to Clark after her husband's death. Here are some extracts:

> But rather may we two most loving and devoted sweethearts be drawn together love, closer and nearer, in the sweet ties and bonds of matrimony, which is the sweetest slavery of God's earth.
>
> 'Tis well to be merry and wise.
> 'Tis well to be honest and true.
> 'Tis well to be off with an old love,
> Before you get on with the new.

Love is a tender herb which must be kept alive by great delicacy, it must be freed from all inclement blasts, or it will droop its head and die.

Sweetheart mine, how things seem to be working together, in bringing us two lovers nearer and dearer together.

As the atmosphere invisibly surrounds the earth, yet is felt by all, so love unseen, pervades every breast, though its temperature varies according to the heart that gives it birth.

Good morning, my lovie: how are you this bright, beautiful, sunlit day? I am well and blooming, I am glad to say and my heart is light, because my baby Myrtle is so much better. Oh! how clever and good and kind you are, Harry darling, to come here so quickly, break her fever and put my most anxious mind at rest darling.

Sweetheart mine, Miss W. must have received your black edge letter this morning, I wonder how she will answer it, my darling. I naturally feel very anxious over your old love and her correspondence, because I am sure she will never let you alone; her death-card was but a blind to secure your writing.

Love, when mutual, gives and expects nothing less than the entire soul of man and woman, and enforces as an absolute duty that truth of which marriage is but the outer sign, seal and ratification, viz., 'What God hath joined together, let no man put asunder.'

Look not mournfully to the past; it cometh not back again, wisely improve the present, it is thine.

Patience and perseverance overcome all difficulties, my very own darling. The great remedy which Heaven has put in our hands is patience by which, though we cannot lessen the torments of the body, we can in a great measure preserve the peace of the mind. So let us be patient and also brave, Bucha Harry darling, it is very interesting to read some of your letters of the past.

How God has worked out all things so beautifully and brought us two most devoted and loving sweethearts close together, and given us freely to each other, here in Agra.

The happy climax is still to come darling, and let us hope and pray it will not be very far away, but will terminate in our happy union and long married life, always together, my beloved.

Previously to Mrs. Clark's brutal murder, which soon was to follow, many attempts were made on her life by her husband. In April, 1911, Clark tried to enlist the help of their servant Bibu and gave him a powder to put into his wife's tea, but Bibu told Mrs. Clark and handed the powder over to her in the presence of her son, Harry.

After this, Clark obtained a culture of cholera microbes from the bacteriological laboratory and endeavoured to infect his wife with the disease, but without success.

Other attempts were made; then Clark approached one Buddhu, who was really a hospital servant but whom Clark employed at his bungalow. Mrs. Clark, aware that

attempts were being made on her life and that sooner or later Buddhu would be pressed into her husband's service, paid him an extra Rs.6, or eight shillings, a month out of her own money in order to keep him on her side. He remained loyal to her, until Clark used threats of the loss of his work at the hospital. Buddhu then gave in and took three powders, one of which he put in his mistress's tea. After drinking it she was at once violently sick. Her liability to vomit had been her saving before and explains Clark's reference to his wife as 'poison-proof'.

It is extraordinary that Mrs. Clark took no action after this attempt, except to complain to Buddhu about the tea. Clark now had him dismissed from the hospital, but he was subsequently reinstated on appeal to higher authority.

Later on, Clark gave Buddhu a liquid and told him to put it into Mrs. Clark's food; this he did, but he only mixed a small quantity with some rice, which the Clark family had for dinner. Clark himself was not present.

This had immediate effect on Mrs. Clark, who left the table, vomited, and had symptoms identical with those of Fullam after taking the heat-stroke mixture. Actually dining with Mrs. Clark and her family on this occasion was another assistant doctor from the hospital. He at once attended to Mrs. Clark, but his suspicions were not aroused, and Mrs. Clark did not inform him of the real cause of her attack.

First in August, and again in November, 1912, Mrs. Clark went to stay with her two sons in Meerut. They were in the Military Accounts Department, working in the same office as that in which Fullam had been employed.

During this second visit Mrs. Fullam and Clark, having grown tired of the repeated failures to take Mrs. Clark's life by poisoning, conspired with the assistance of the wretched man Buddhu to murder Mrs. Clark by violence on her return home. She arrived in Agra on November 14th, and on the night of the 17th a gang of four low-caste men forced their way into Mrs. Clark's bedroom, where her daughter was also sleeping, and butchered the unfortunate woman with a sword. One stroke in particular cut deeply into the brain through the scalp and skull.

Clark was absent at the railway station, with the double object of having an excuse for being out that night — he explained that he went to meet a friend passing through by the night mail — and also of having an alibi.

In his statement when arrested he made two remarkable and damning mistakes; one was with reference to the railway route from Delhi to Bombay, the other as to the name of his friend. The name given to the police was not the same as the name he had given Mrs. Fullam. This, combined with his well-known evil character and his strained relations with his wife, at once aroused suspicion.

The gang of murderers was paid Rs.100 (£6 13s. 4d.) by a cheque drawn on Mrs. Fullam's account with the Bank of Bengal, Agra branch, and actually endorsed by Clark — such was the amazing rashness of the man.

The child, Kathleen Fullam, gave evidence at the trial that after Mrs. Clark's murder she saw Buddhu and another of the gang enter her mother's house, and also overheard part of a long conversation in which the question of money was raised. This quick-witted child evi-

dently connected the murder of Mrs. Clark with the visit of these men to her mother and Clark, and her evidence went to show that she had always suspected her mother to be responsible for her father's death.

Being, as already stated, in civil medical charge of the Agra District, I was responsible for the medical-legal evidence, and consequently was given all the available facts, shown the correspondence between Mrs. Fullam and Clark, and handed Clark's medical books, including Lyons's *Medical Jurisprudence for India*, the pages of which dealing with arsenic, cocaine, atrophine and gelsemium had been turned down and underlined.

After studying the case, I had daily consultations with Mr. (now Sir) C. Ross Alston,[1] the counsel for the Crown, and attended the whole of the preliminary investigations before the magistrate's court at Agra.

While it is true that the documentary evidence was so complete that there appeared no possibility of the accused escaping conviction, it was necessary to provide evidence in corroboration, and this presented many difficulties, for the following reasons:

While it was quite clear that Clark used arsenic as his first line of attack, and it had been administered over a period of about seventy-five days, with a larger dose on June 17th, the great probability was that no arsenic had been administered after that date. Now arsenic is not an accumulating poison, it is temporarily deposited in organs

[1] Ross Alston was a very small man. One day when having an altercation in the bar of the Allahabad Club with a subaltern, the latter suggested that he might put Alston in his pocket. This immediately produced the rejoinder that he would then have more brains in his pocket than he had in his head.

such as the liver, spleen and kidneys, but is rapidly eliminated by the urine and other secretions. There was, therefore, very little hope of discovering arsenic in the internal organs; on the other hand, there was considerable probability of finding arsenic in the denser parts of bone, in the hair and possibly in the nails. After the post-mortem, following the exhumation of Fullam's body, I sent to the chemical examiner a quantity of hair, and half one femur (thigh-bone). No arsenic was found in the former, but 0.015 grains in the latter.

The next point to clear up, if possible, was, what were the other poisons which Clark had tried, apart from the heat-stroke mixture.

Mrs. Fullam in her letter of July 29th had said:

> I am sure when he tastes his plate of soup this evening at dinner he will remark that it tastes like bad medicine, darling. The same that he complained of the jalap.

Clark once referred to jalapine. Jalap is a drastic purgative and in large doses may inflame the intestinal coat. Clark may have given it with the idea of inflaming an intestine already rendered more prone to inflammation by the prolonged administration of arsenic.

Now as regards the famous heat-stroke mixture. I found in Clark's copy of Lyons's *Medical Jurisprudence for India* the pages dealing with arsenic, gelsemium, cocaine and atrophine, turned down and underlined. The idea of the mixture, as we have seen, originated with Mrs. Fullam, the results of accounts in the daily press of heat-stroke. She communicated the idea to Clark on July 16th, but it was not until the 26th of that month

that he dispatched the mixture, and it is not improbable that he spent some of this time in working out a combination that would give the symptoms of heat-stroke, i.e. a sudden sharp rise of temperature from 104° to 110° with a hot burning skin, rapid pulse, and delirium or coma and convulsions.

Now there are only four drugs which cause a rise of temperature; two are rare, and would have been very difficult for Clark to obtain, but to the other two, atropine and cocaine, he had ready access in the hospital.

The action of atropine and belladonna are the same, atropine being the alkaloid of belladonna, and would cause rise of temperature up to as much as four degrees F. in toxic doses, also a flushed skin and rapid pulse, and finally delirium.

Cocaine would increase the temperature and quicken the pulse and cause delirium and convulsions.

It is impossible to say whether Clark used atropine with cocaine or used the former only, nor was it possible to estimate the approximate dose used. The recognized dose of atropine is from $\frac{1}{200}$ to $\frac{1}{100}$ gr., and $\frac{1}{2}$ gr. has proved fatal. The recognized dose of cocaine is $\frac{1}{10}$ to $\frac{1}{4}$ gr., and $\frac{2}{3}$ gr. has proved fatal.

It did, however, appear remarkable that Fullam should have survived two doses, especially in his weak condition, after the long administration of arsenic.

And the dose must have been considerable, as the baby, Myrtle, in Mrs. Fullam's absence, so it was discovered, had got hold of the empty bottle and had developed definite symptoms from sucking the cork, and children are well known to be very tolerant of belladonna. Also Mrs.

Clark developed almost immediate symptoms after her dose in the dinner rice, though saved by immediate vomiting.

There was no hope of discovering either of these alkaloidal poisons from Fullam's internal organs, on account of the time that elapsed between their administration in July and August and his death in October.

The poison used on October 10th 'to finish him off' — the words used in Clark's confession — was most probably antipyrin, put by Mrs. Fullam into her husband's dinner, and Clark was almost certainly lying when he said at the trial that the last injection consisted of digitalis, strychnine and ether as a stimulant. It was probably gelsemium hydrochloride, a very potent drug, the official dose being $\frac{1}{60}$ to $\frac{1}{20}$ gr., and 48 grains were found in Clark's possession. It is freely soluble in water and its preparation for hypodermic injection would conform with little Kathleen's description of Clark's preparation of the final injection he gave her father.

An interesting point as regards the gelsemium hydrochloride was told me by the Criminal Investigation Department. The registers of all chemists in India, Burma, and Ceylon had been examined to discover where Clark had made his purchases, and the only two doctors who had prescribed this drug in those three countries in the last two years were Clark and myself. I had found it useful in cases of neuralgia resistant to other treatment.

From the medico-legal standpoint, the case is of interest in giving a complete record of slow poisoning by arsenic, but an item of greater interest is the administration of a poison or combination of poisons with the idea of producing the appearance of heat-stroke, and Clark was so far

successful that all the doctors who saw Fullam in the Station Hospital at Meerut had no suspicion as to the true cause of his illness.

It is probably the only case on record in which a conviction for murder has been obtained without finding the poison in the body that was the immediate cause of death.

No jury was likely to convict on the 0.015 grains of arsenic found in the thigh-bone, for though arsenic is not a natural constituent of a human body at birth, nevertheless there are so many unsuspected sources by which it may enter the body in small quantities (and analysis can detect such a minute fraction of a grain) that caution is necessary in swearing in any given case that arsenic was the cause of death.

A question that will at once arise in the lay mind is, why the condition of chronic arsenical poisoning was not diagnosed by any of the numerous doctors who saw Fullam from time to time? More especially as the unfortunate man was a typical example of this condition, having shown from time to time all the gastro-intestinal symptoms, including the catarrhal symptoms from the excretion of the poison through the lungs and eyes, and the paralysis from the inflammation of the nerves in the legs; the only symptom apparently that was absent was pigmentation of his skin; this is a later symptom and is not the same change as the improved complexion noted by Mrs. Fullam soon after she commenced the 'tonic powders'.

The probable explanation is that Fullam had no regular medical attendant, and up to the last had absolute faith and confidence in his medical friend Clark.

The only doctor who saw Fullam at all frequently, as he

lived near by, was Captain Weston, I.S.M.D., who did suspect arsenic and questioned Fullam as to whether he had any enemies.

The case presents a mine of psychological interest first as regards the character and methods of the poisoners. Mrs. Fullam showed more resourcefulness than Clark; she it was who thought of the heat-stroke mixture, and she undoubtedly evinced ingenuity in the way in which she avoided suspicion, notably in throwing out a suggestion to the doctors at the Station Hospital, when her husband was leaving after the first attempt with the heat-stroke mixture, that with the continued unusually hot weather, there was a possibility of her husband having a relapse.

Mrs. Fullam took no risks with accomplices and always administered the poison herself.

Outwardly she was kind and attentive to her husband, and this was mentioned by the hospital orderlies when giving evidence as to Fullam's illness in hospital.

She was quiet and discreet as regards her meetings with Clark, which were always secret, and never in public, so that although the Fullam family lived in a gossiping community, little comment was made until after Fullam's death.

Contrast with this Clark's record.

He showed little ability in his grading of the doses of arsenic or the methods of administration; had he possessed any medical skill, with the assistance of such a hard-working and persistent ally as Mrs. Fullam, he should have been able to poison Fullam quickly, and without any awkward questions.

One of the most remarkable facts in this extraordinary

case — and one which exemplifies Clark's vanity — is the way in which he employed a clerk to help him with his letters to Mrs. Fullam, and his rashness in showing him her replies. On one occasion when the letter writer had failed him, Mrs. Fullam in reply said, 'Besides, I do really think you are growing tired, and finding it irksome, for you give me no news whatever, Bucha darling, but just imitate my letter in return.'

Clark's handling of his two accomplices, Bibu and Buddhu, was almost incredibly crude.

He made no effort to conceal the strained relations with his wife whom he openly abused and insulted. This was one of the facts that aroused suspicion and led to his arrest.

It is also interesting to compare the bearing of the two victims. Fullam, as we have seen, did not suspect his wife and had complete confidence in his friend until the awful truth was suddenly brought home to him in his last moments.

The simple Christian character of this unfortunate man so greatly sinned against, with all his prolonged and intense suffering, is pathetically shown, for in the moment of revelation he does not call in from the next room his wife and her lover, accuse and revile them, but, having asked Divine mercy and blessings for his children, he awaits his passing with silent patience.

Mrs. Clark on the other hand knew for over two years before her death that her husband was making repeated attempts to poison her. She left a record of them, written while staying with her sons in Meerut three months before her death. It was apparently meant for her sister living in Calcutta, and was found in a locked drawer in her bedroom after her murder on November 17th.

No. 1. Why is Mr. Clark always angry with me and my three children?

No. 2. Mr. Fullam died in Agra on the 10th October 1911, in No. 9, Metcalf Road, Agra.

No. 3. Mrs. Fullam has been living in Agra ever since her husband's death.

No. 4. All my friends in Agra tell me that Mrs. Fullam was living with my husband as his wife for the last year when Mr. Fullam was alive in Meerut.

No. 5. Mr. Clark has got an increase of pay from March, 1912, and he got a lot of back pay, but he only gave me a hundred and I don't know what he has done with the rest of the money.

No. 7. I have been told that Mr. Clark has kept Mrs. Fullam as his wife and allows her fifty rupees a month, and that she is going to get a baby very soon, and when I die he is going to marry her.

No. 8. . . . First of all we came to Agra Fort and when we were there were all very ill, and I nearly died over there as my cook poisoned me; must be through Mr. Clark's help.

No. 11. . . . Mr. Clark has become very wicked ever since we have gone to Agra, as he keeps very bad company.

No. 12. When first we came to Agra from Delhi I brought a very good cook with me, but he ran away back to Delhi very soon after, as he told me that Mr. Clark gave him three powders to give me in the tea, and if he did not do so that

Mr. Clark would kill him, but he ran away, and gave back the dry poison to my son, Harry.

No. 13. Last month I was very ill, vomiting as my cook gave me something in my tea. I dismissed him without giving him his pay.

No. 14. I was very ill with vomiting all night after the day of the Sitla Mela (a Hindu festival), and if it was not for two assistant surgeons by the name of Jacob and White, I am sure I would have died that very night.

No. 15. On the 11th August my son Harry came to Agra and brought my son Walter and my daughter Maud and myself away with him to Meerut on the morning of the 13th, and we are feeling ever so much better over here.

No. 18. I am perfectly sick and tired of living with Mr. Clark and would like to live for good with my son Harry, as I fear he will be putting up the men servants to poison our food as soon as we go back to Agra.

No. 24. Mr. Clark and his brother are selling their grandfather's house for six thousand rupees, and both brothers will get three thousand each. What will Mr. Clark do with all his money? Give it away to Miss W., Mrs. Fullam, or leave it to his three children?

His gold watch and the seal are all at Mrs. Fullam's house, with a box full of letters from different women.

Will Mrs. Fullam go along with him to the next station, or will she remain fast in Agra?

Such a wicked woman should be put to death.

No. 25. After Walter gets work to do, and Maud gets married, won't it be better to separate from Mr. Clark for good and live with my son Harry, as I would be afraid to trust my life alone with him, as he is not a good man?

No record could state more clearly her knowledge of the attempts on her life and her utter distrust of her husband. Why then did she continue to live with him? Probably because she was devoted to her children and considered it a duty to keep the home together until her daughter married and the second son got work. She did this although her husband subjected her to repeated insults, and ill treatment was heaped upon her, showing a truly pathetic devotion to the duty which she had set herself to carry out.

As regards Clark's character it is difficult to write with moderation. His utter callousness, more especially for a doctor, to the terrible suffering he caused Fullam and Mrs. Clark would be unbelievable, but for such a complete record of evidence. This account has been kept free of revolting details, but the original records are full of his lust and sexual passions of the most degrading degree. The only thing that can be said in his favour is, as already recorded, that at the trial in the High Court, when he made his confession, he tried to take the entire blame on himself and to shelter his mistress.

Mrs. Fullam's psychology is bewildering in the extreme. In one of the many hundred letters which she wrote to Clark, the first three pages described the awful

agonies her husband had gone through as the result of one of her administrations of poison. Clark had asked her to send him a prescription which another doctor had given Fullam for his eyes some time previously.

Turn over to the fourth page of the letter and she writes, 'No. I will not send you the prescription, as you might put something into it, that would injure the eyes of a man who has done nothing but good to me in this world.'

A mentality that defies explanation!

She was devoid of any sense of shame, and at the same time was proud and vain.

She had a devoted husband, a comfortable and happy home, with ample means for her class, she was a good mother and proud and devoted to her children. Her light and gay nature never forsook her to the end, but she convinced herself that Clark was entirely responsible for her crime. Clark overwhelmed her, and took her completely by storm by his intense, passionate love-making and professed admiration, his strong determined character dominating a weaker nature.

Sentence of death was pronounced on her, but as she was pregnant it was commuted to one of imprisonment for life.

The child was born in July, and on May 29th the following year she died in the Naini Jail at Allahabad — from heat-stroke!

Of the four hired assassins three were sentenced to death but Buddhu turned approver and was pardoned, one was acquitted, the other two were executed.

There is one other point. Why did Clark keep Mrs.

Fullam's letters? There must have been an object in preserving that bomb which at any moment might explode. Personally I think he wished to keep a hold on Mrs. Fullam as she had a little money. When he tired of his infatuation she might have followed Fullam and Mrs. Clark. There were grounds for suspicion, by the way, that just as Mrs. Fullam was clearly not his first conquest, so the unfortunate Fullam was not his first victim.

Looking back on the four principal figures in this horrible case, one reflects on the ill-fate that brought Clark and his wife together, when Mrs. Clark would have made an ideal wife for Fullam, both being of the same quiet character, people devoted to their families and home life.

The layman naturally thinks, why did the Fullams' doctor friend not take definite steps to ascertain the nature of Fullam's illness. The position of any doctor in these cases is one of extreme delicacy and difficulty. Let us for a moment put ourselves in his place. He usually is in a state of complete ignorance and quite unaware of the necessity of thinking of poison, unless rumour or gossip has reached his ears. He naturally thinks of the symptoms as due to disease; he may have suspicions, but rarely can he be certain. What is he to do? He must take some steps to avoid a fatal termination. He can send the patient's urine for analysis for poison to an expert, have a consultation with another practitioner, and have the patient watched day and night with two competent nurses of his own selection, have the patient removed to a nursing home, or take steps to banish the guilty person (if found); but with the exception of the first all these steps involve difficulties and the probable destruction of

evidence by temporary concealment on the part of the criminal. If suspicions are more or less corroborated by subsequent events he is in a still more difficult dilemma. He might inform the police, but it must be remembered that a doctor is the confidential professional friend of his patient and that it is not his duty to enter into detective work; besides every case of poisoning is not criminal, it may be accidental and this would have to be excluded before informing the police. If the victim is an adult and strong-minded, in possession of all his mental faculties, he or she might be informed or a member of the family, or finally he might inform the suspected person in private. In any of these contingencies the reader will realize what a number of lines of reproach the doctor lays himself open to, on suspicions which may prove very dearly to his cost to have no foundation.

I know of one case in which the problem was solved in a swift and dramatic manner. The family doctor had suspicions that the wife of a clergyman was being slowly poisoned with arsenic. He called in another practitioner who confirmed his suspicions. Together they retired to the study to talk over the position, when one of them noticed a book on the shelves dealing with medical jurisprudence. Taking it down he discovered that the section on arsenic poisoning had the leaves turned down. Further investigation brought to light some small scales with particles of what appeared to be arsenic adhering to one pan. They left the house leaving the book on the table open at the arsenic section, with the scales on top. The vicar came in and found the evidence of his guilt, and promptly went out and committed suicide.

CHAPTER X

THE CITY OF THE TAJ

HAVING on different occasions taken numbers of people to see the Taj for the first time, it was always of interest to me to note the effect it had upon them. I may give three examples. Travelling back one day to Agra from Cawnpore I met an American tourist in the train, who regaled me with the staggering information that he had seen the whole of India and Burmah in nine days. I mentioned that my car would be waiting at the station and that, as it was such a wonderful moonlight night I intended to drive to the Taj before going home, and I offered to take him. He accepted, and, as we approached, the radiant white of the marble rippled from shade to shade in the full glory of the moonlight.

My companion sprang out of the car, thrust his head in at the gateway, soliloquized 'Seen', produced a stumpy piece of pencil, made a tick in a guide book, turned on his heel, jumped into the car, and requested me to drive him to his hotel.

At the opposite pole was a well-known architect, who when he got half way between the gateway and the Taj, sat down by one of the fountains, and passed into a kind of trance. Not wishing to disturb his enjoyment, I left him for over an hour, and walked round the gardens, returning to find him in the same state. I then endeavoured to rouse him gently. I was informed by a mutual

friend next day that he had complained of my entire lack of sympathy in the beauty and romance of our surroundings.

The third, a man of science, Dr. Gilbert Fowler, whom I had never suspected of any poetic tendency, sat down by one of the pools and wrote:

The sound of hidden waters murmuring,
Faint wafts of scent from rose-embowered ways,
Ranks of tall cypresses by crystal pools,
Lead up the eye to where beneath the moon
Rises that fairy dome among the stars,
White, glimmering, ghost-like, fragile as a dream.
The dim vast portals hold no hint of gloom,
Even the very shadows lightly fall
Across the marble spaces, while, far down,
The age-old river wanders thro' the night.
Sorrow and joy of all the East are here,
Sorrow of loss and strife of love and death,
Joy of this world and dream of Paradise,
Transfigured in a marble miracle.

To those who have never seen the Taj, any description may seem a mere squandering of epithets. All I can say is that I have lived near it for over eight years and seen it under all atmospheric conditions, at every hour of the day and night, and I have never failed to be thrilled with its beauty and romance.

What romance! Surely Shah Jehan, soldier and all-conquering Emperor, must stand out as one of the greatest lovers of history. Yet this man was cruel to a degree and remorseless as regards his other wives and the beauties of his harem. Let one of them incur his suspicion or

displeasure and she passed from view to the dark dungeons below the river's level, there to sigh and languish until a noose tightened round her soft neck and the frail body was tumbled down a chute to the crocodile pool in the Jamna.

It is said that from lust to cruelty is only a step, and Shah Jehan was certainly no exception, but his devotion for Muntaz-I-Mahal, which means 'the chosen of the palace', knew no bounds. This love absorbed his soul for nearly fifty years. She was his constant companion, even accompanying him on his many campaigns. She died during the first year of her husband's reign when giving birth to her eighth child, and the Emperor took an oath that her tomb should be the most beautiful the world had ever seen.

In the following year he commenced the Taj and built it for twenty-two years with an army of 20,000 workmen. The white marble came from Makrana and gems and precious stones were brought from all parts of the earth to furnish the inlayers with their material. The cost has been estimated at two million pounds sterling.[1] So unlike the oriental potentate, his devotion appeared to be accentuated by his wife's passing, and when he was deposed by his son Aurungzebe in the thirtieth year of his reign, he implored that he might be allowed a prison in the fort from whence he could look out on the Taj, and he died with his eyes on the resting place of his love and they buried him by her side.

If this great Emperor, with all his might and power, was unable to keep his precious wife alive, he determined

[1] So Sir Edwin Arnold says in *India Revisited.*

to immortalize her, and the pathos of it all is expressed in a verse on her tomb which runs, after recording the titles and greatness of the Emperor: 'His Majesty King of Kings, Shadow of Allah, whose Court is as Heaven: This world is a bridge! Pass thou over it, but build not upon it! This world is one hour; give its minutes thy prayers, for the rest is unseen.'

The intricate delicacy of the architecture of the Taj, the wealth of its material, and the complexity of its marvellous design have been the theme of many writers of all nations. To appreciate its beauty fully, you should see it under varying conditions — on a bright starlit night, under a full moon, by sunrise and sunset during the rains when the air is free from dust and there is a wonderful play of rose tints on the great white dome.

Seen at a distance by moonlight it appears to float like a cloud in space; there are no lines, no angles, nothing jars in this the noblest of all earthly monuments. Viewed under the fierce rays of a June sun, its magnitude strikes home: the plinth is over 320 feet each way, and the golden pinnacle surmounting the dome towers into the sky for 244 feet. But it never loses its fineness and at times it appears so fragile that you fear it may break into a thousand fragments.

This tomb of Muntaz-I-Mahal is surrounded, as are most Moslem burial places, with a garden. This arose from a custom of the Moguls to select a plot of beautiful ground and build thereon a summer house, surrounding it with flower gardens and stately trees, the whole enclosed within high walls. During the lifetime of the owner it was used for pleasure and frivolity, but when he

died it became his silent mausoleum, so that it is not improbable that the surroundings of her tomb were in Muntaz-I-Mahal's lifetime her beloved garden. The entrance is through a massive gateway of red sandstone, inscribed in mosaic with texts from the Koran, with a vaulted arched roof inlaid with white marble. The entrance is one of the vantage points from which to view it, for, stepping back a few paces, the Wonder of the World is framed as though in a picture by the arch of the gateway, the eye glancing down a long avenue between tall lines of stately cypress trees, over marble pavements and cool pools with sparkling fountains, to the great white marble platform on which the Taj stands four square.

The Taj was designed by Ustad Isa, a native of Shiraz in Persia. A family claiming direct descent from him is still extant in Agra, and the head of this family in 1920 presented me with a wonderful sketch of the Taj drawn by himself.

The original conception? Opposite the great white marble gem on the right bank of the Jamna was to have been raised a great black gem on the left bank, in the same proportions, for the Emperor himself, and the wide waters of the river were to have been spanned by a bridge, all in solid silver, uniting the tombs of the peerless wife and the inconsolable lover.

But here is a terrible thing to think about. It is generally accepted that on completion of this, the world's greatest architectural wonder, the Emperor Shah Jehan ordered Ustad Isa's eyes to be put out, in order to prevent the possibility of his designing any structure that might equal or exceed the Taj in beauty.

India has many dead cities — Amber, Golconda, Chitor — but none impresses so much as Akbar's capital, the walled city of Fatehpur Sikri, 23 miles south-west of Agra. Sitting one evening on one of its terraces waiting to try and get a shot at a large hyena that had taken babies from the villages below its walls, I was lost in a day-dream. This great town is surrounded on three sides by a wall five miles in length, with, on the fourth side, a natural depression which formed a lake. Beyond the lake stretched the royal park. Why was it built? After fifteen years of such colossal work as the building entailed, why was it abandoned? The other dead cities of India are time-worn and in varying stages of decay, but in Fatehpur Sikri there are no broken arches, no tottering columns, no crumbling walls: the palaces, mosques and public buildings are as perfect as when built in the years 1569-1584. Again what manner of man was this Emperor who built and lived within these walls?

So let us consider these three interesting points.

First, why was it built? In the lone village of Sikri just below us there lived in a cave a very holy man Sheik Salem Chishti. One day while on the march Akbar halted here, and being troubled at the thought of having no male issue, consulted the saint, who prophesied that if the Emperor would build a city on this ridge of sandstone rocks, his wish would be gratified. And so it was, for a son, afterwards the Emperor Jehangir, was born to his Christian wife in the saint's cell.

As to why the city was abandoned, opinions differ. Some say that Akbar, having attained his wish, lost interest in the place, and transferred his magnificent

court to Agra. Others say that the saint, being disturbed in his devotions by the large concourse of people that thronged the city, said to the Emperor, 'One of us must go elsewhere.' Whereupon Akbar replied, 'Let it be your servant, I pray.' However that may have been, the City of Victory — for such is the meaning of Fatehpur — is a wonderful testimony to the power of Eastern despotism moulding the lives and destinies of millions of men purely for its own ends.

Akbar was not unmindful of the holy man, for Fatehpur contains a great quadrangle dedicated to his memory. This is entered by the Buland Darwaza, or Gate of Victory, 130 feet high, and probably the finest entrance to any temple in the world. Forming one side of the courtyard is the Jamma Masjid, one of the noblest mosques of Islam, severely simple yet dignified and profoundly moving.

In a corner of the quadrangle stands the shining tomb of Salem Chishti himself, surrounded by a beautiful screen of white marble lacework, and twined into it are countless threads of silk and string, the work of childless Indian wives, all praying to the saint to succour them in their great want, even as he helped the great Emperor. (It is not unknown for their sisters of the Anglo-Saxon race to follow this example.)

But what of the man? This unique ruler, a contemporary of Queen Elizabeth, was born on the banks of the Indus of a Persian mother and began to rule at the early age of fourteen. He became not only one of the most powerful monarchs of all time, but a truly great statesman: his tolerance and breadth of outlook were remark-

able, especially for that period. He took Hindus, Mohammedans and a Christian for his wives, he appointed Hindus to the highest offices and took them fully into his confidence.

He held broad religious views, tolerating the Hindu faith and disliking the fanaticism and bigotry of his own people; and he even went so far as to try and invent a reconciling religion for his subjects. His dominating idea would appear to have been the blending of the conquerors and conquered into one Indian people. Who knows? Was this despotic monarch near the solution of the eternal problem of Hindu versus Moslem? Possibly, but to-day they are as far apart as the north pole is from the south. It is notable that Hindus believed him to be a reincarnation of one of their own people. Although unable to read or to write, he took a keen interest in all forms of thought, cultivated and favoured Hindu literature, and with his artistic taste founded a new school of architecture.

As a young man he was full of the joy of life, with a kindly, gracious personality and great courage, but in the latter part of his career, the bigotry and vices of his children soured and disheartened him and his strong character yielded. In these years the Emperor always had at hand a box of sweetmeats divided into two sides, favour and disfavour. If the monarch presented you with a sweet from the side of favour, you knew that you were certain to receive great honours or appointments, but if from the side of disfavour your span of life could be counted in minutes, for these sweets, albeit of a delicious taste, were charged with a deadly poison. To refuse

acceptance was impossible. No one living could say nay to the Great Akbar. History records that Akbar's own end in 1605 was brought about by one of these same delicacies, for one day wishing for a sweet he accidentally took one from the wrong side of the box.

Five and a half miles south-west from Agra is Sikandra, Akbar's mausoleum, which he commenced to build himself. It stands in a garden of one hundred and fifty acres, surrounded by massive walls. The entrance is by a towering gateway, flanked by four minarets of white marble.

The design is unusual and is said to have been copied from a Buddhist model. There are four square terraces, placed one above the other and gradually decreasing in size. Above the last is a white marble enclosure of trellis work in exquisite patterns surrounding a marble colonnade, in the centre of which stands the tomb of the Great Emperor, a perfect example of delicate arabesque tracery in which may be seen the ninety-nine names of God. Close by is a pedestal with a concave top in which the Koh-i-noor diamond formerly rested, this precious stone with such a long romantic history, which has now at last found a permanent resting-place among our own Crown jewels.

There is one other building in Agra itself which I must mention, if only because it has always taken my fancy above all others by reason of its beauty and wealth of detail : I-timadu-d-daulah, which is situated on the left or the opposite bank of the Jamna. It is the tomb of the Emperor Jahangir's Prime Minister and is one of the finest examples of Indian architecture, being built entirely of white marble in open filigree work. It is covered with

a mosaic of 'pietra dura' considered by Fergusson to be the first and finest example of that method of architectural embellishment in all India. The mausoleum is of two storys, the upper consisting of pillars of white marble inlaid with coloured stones, with a series of perforated marble screens stretching from pillar to pillar.

Agra, the city of Akbar and Shah Jehan, with its wealth of the most superb examples of Mogul architecture, holds one entranced. The saying that the Moguls designed like Titans and finished like jewellers is surely exemplified here in the vastness of their buildings and their systems of inlaying with marble and precious stones.

Fergusson says, 'It will undoubtedly be conceded by those who are familiar with the subject that for certain qualities the Indian buildings are unrivalled. They display an exuberance of fancy, a lavishness of labour, and an elaboration of detail to be found nowhere else.'

It was at Agra, by the way, that I first met that very clever and versatile woman, Mrs. Alec-Tweedie. She was an old friend of my wife's who came to stay with us just as we were leaving India for the last time. Who is there that is not familiar with her admirable books? It was in our bungalow at Agra that she began to take up painting seriously. She delighted in the bright colourings and varying scenes of the bazaars. Thus opened a new chapter in her brilliant career.

My appointment to Agra in 1912 not only meant the usual duties involved in the charge of a district, but included those of the Head of the Men and Women's

Medical Schools. I was definitely told that the discipline of the former was not satisfactory and required a firm hand. I came to the conclusion that this was partly due to lack of occupation, for after lecture hours the students had little to do but sit about intriguing and talking sedition. Games were introduced and we had a wonderful hockey team playing a fast hard-hitting game in bare legs and feet. But the trouble had gone too far, and one Sunday morning a car full of Indian professors and lecturers drove up to my bungalow in a great state of excitement, with the news that the great majority of the school had gone on 'strike' and left their hostels. The assistant in charge of the hostels handed me an amusing note which had been put into his letter-box: 'We the students of the Agra Medical School go on strike. Your most obedient pupils.'

I rapidly decided on my line of action. Calling up the police, I ascertained that the students had gone in a body to the Victoria Park to hold a meeting. I arranged with the police for Indian detectives to attend the meeting, take notes, and endeavour to ascertain the cause of this sudden move. Two professors were sent after the students with a letter directing that they should return to the school and draw up a list of their grievances in writing. At the same time I intimated that if this was not done they would be excluded from their hostels.

The professors returned with a flat refusal, so, calling up the police, I arranged for a strong guard in the hostels to exclude the students until they made a statement. The police reports coming in after the meeting indicated no definite grievances, and when the students found

themselves excluded from the hostels they went off to the city where organized agitators, always ready to stir up any trouble against the government, provided them with accommodation. Having duly reported all the facts to my Inspector-General, Colonel (now Major-General) Sir Courtney Manifold, I.M.S., I posted notices to the effect that I was prepared to meet the students at any time, but that my terms were Unconditional Surrender. Then began a struggle lasting for over six weeks. Questions were asked in the Provincial and Legislative Councils; the native press published lying and scurrilous articles about my administration and private life. I asked the government to prosecute, and when they refused I requested permission to take the case up myself but again had a negative reply, although I was given to understand that my action was approved. No visible support or backing was given by the government, and this rendered my position far more difficult. But I was determined either to win through, or, if finally let down by the authorities, to resign. I was strengthened in this conclusion by the Heads of other colleges in Agra coming to me and requesting me to hold out at all costs, as otherwise the result would be absolute chaos in an important educational centre.

After about six weeks the students showed signs of giving in and a certain Raja who wished to curry favour with the government came to me one day and said they were now ready to meet me. I said, by all means, but let there be no mistake about the terms; these were definite. The students wavered for another two days, and then the Raja came and said they had agreed. I replied that they

should all assemble in the large lecture theatre at 2 p.m. The Raja came to my bungalow at 1.30 and we went down together. He was anxious to come with me into the theatre, but I said, 'No, Raja Sahib! This is now a matter of discipline that can only be dealt with by me.' As I entered the hall some three hundred rose to their feet. The majority were sheepish, but there were a few leading spirits still inclined to be truculent.

I began by explaining that it was utterly absurd for them to talk about 'striking', as with a very few exceptions they were being taught, clothed, fed and housed by a benevolent government. I then pointed out that the only losers were themselves, with a loss of six weeks of their course. Finally I called down twelve of the principal leaders, told them they were dismissed from the school and would be debarred from any government service (the greatest of punishments). Then twenty-five more had their names called out, and I punished them by the loss of a year's seniority. Finally fifty more were called and these were bound over to prevent any trouble between the strikers and the few non-strikers, mostly Christian students. From that time on I never had any more trouble and we were on the best of terms for my remaining six years. When I left Agra, they came to me in a body and said, 'You have been strict with us but always absolutely just and fair', and my reply was that they could not have paid me a greater compliment.

Now this is an interesting point. Several months after the 'strike' I began to make inquiries as to what was its cause. The Indian press and certain members of the Legislative Council had asserted that it was a desire

on the part of the students to be examined by Indian professors, but imagine my surprise to hear from every student interrogated that their one and only grievance had been that they wished to be examined by Indian Medical Service officers. When asked the reason, they stated that they would thus get fairer and juster treatment. Could there possibly be a better example of the mischief that can be wrought by well-organized outside agitation?

Work in the Hospital at Agra began early, especially in the hot weather. After a light breakfast at 6 a.m. I was generally under way by 7 o'clock. I first visited the women's side, of about 150 beds. There were four excellent women doctors in charge of this section, but I did part of the operative work, including half the Caesarian sections, and almost every morning there was an abdominal or other big operation to be done, sometimes two or three.

From the women's side I went to the eye hospital. There was a very good Indian specialist in charge, Dr. De, but there were always more operations than he could deal with, principally cataract. Eye diseases are very common in India, especially cataract due to the intense glare on unprotected eyes, and hundreds and hundreds of these operations had to be performed every year. The operation is not complicated but it requires a gentle touch with a steady hand. The first stage is passing a very thin sharp knife right through the eye in front of the pupil and then cutting upwards with an even movement.

This is done by standing behind the patient, so that in operating upon the left eye, it is essential to make this incision with the left hand. Not being ambidextrous I was naturally perturbed at making the first attempt and never shall I forget the summoning up of will power necessary to make the first incision without a tremor. After the first effort I got on better and ultimately I considered myself more skilled with my left than my right hand. But it was a great struggle.

From the eye hospital I looked in on some of the classes going on in the medical school, and if my opinion or advice was wanted in any of the special departments, such as X-ray or the pathological or the medico-legal, I next went there. It was not necessary to visit the medical wards every day, so that I next went on to the men's surgical side, where there was at all times of the year a great variety of work and far more than the Indian surgeon in charge could possibly deal with. I usually spent about a couple of hours there operating and seeing the principal cases.

Patients will often go great distances to one particular man in whom they have faith. In the case of Colonel 'Jullunder' Smith at Amritsar with his novel innovation of the cataract operation, people flocked from all over India and specialists from America and many other countries came to study his method.

At the Thomson Hospital I operated on a man for stone in the bladder who had actually walked 800 miles to Agra.

Then I went to the last section, the European hospital. From there I went back to the offices and supervised the

administration of the hospital and medical school, seeing the Indian doctors in charge of all the principal departments and teaching.

I reached my bungalow about 2 p.m., and after a bath and lunch had consulting hours for private patients at my house from 3 to 5. Then after a cup of tea I went to the city to see any cases in consultation and shortly after 6 o'clock played either a game of polo or a couple of sets of tennis, returning home directly after for a bath, to deal with reports and correspondence before dinner at 9.15, after which I went to bed as soon as the heat would let me sleep. A very full but happy day.

Occasionally I started out about 5 a.m. to inspect the small hospitals in the district situated about twenty or thirty miles from the city. And at least one morning a month I supervised the sanitation of the city with the M.O. of Health or sat as chairman of the public health committee of the municipality. There was always plenty of other work in the shape of committees, evidence in court, and endless reports, etc., to be sandwiched in where possible.

I tried as far as possible to make the inspections in the district without letting those in charge know of my intentions, in order to gain a better idea of the work that was actually done in these institutions, and therefore kept my plans secret from my office which might communicate my movements.

One morning after going a few miles my car broke down, and I was compelled to return. Passing the telegraph office, I noticed one of my clerks emerging, and I determined to see what had taken him there. The

telegraph master produced a telegram just handed in, addressed to the hospital for which I had set out, with the following laconic but hardly flattering message — 'The devil has started.'

When the Great War broke out I was actually in hospital at Guy's, having been operated on for appendicitis, but was quickly sent out to India. I realized at once that the Indian Army would at least be doubled before the end and that a great effort must be made to provide the additional doctors required. There were large numbers of excellent Indian candidates available, most of whom had recently passed their B.A. examination. I put up a scheme to Government, asking that I might be allowed to recruit 300 or 400 of these men, and I guaranteed to educate them for three years without any additional teaching staff, and on the termination of the war to have them readmitted for another year in order to complete the necessary four years' curriculum. At first I was told that the war would be over in three months and that there was no necessity, but I persevered and eventually 50 recruits were sanctioned. Then I immediately took another 50 on my own responsibility. This went on until there were just under 500 students in school. To cut a long story short, when the Indian Army was doubled we were able to hand over approximately 230 men who had passed after three years' training, and the following year, when war broke out with Afghanistan, another 102.

This of course entailed an enormous amount of extra work for my staff, and in some cases the quadrupling of

lectures and classes, all of which was done without any increase of salaries. It was as fine a piece of war-work as was carried out by any Indian organization, and my only regret was that government did not recognize their loyal and devoted services.

Before finally leaving India there was one educational problem with which I attempted to deal, and that was the difficulty with which these students were confronted, after qualification, in respect to post-graduate courses or help from modern up-to-date books. The former were practically non-existent and the latter were too costly and numerous for men with small incomes. This lack was a very serious matter and on account of it many practitioners after a few years grew disheartened and were giving up Western medicine. I therefore determined to write a book to meet this need, covering as far as possible in one volume all the subjects required by an Indian practitioner, and I called it the *Medical Guide for India*. In the last fourteen years this book has had two reprints and has been brought up to date in four editions. Judging from many grateful letters from India, and from its steady sale over all these years, the object for which it was written is to some extent being fulfilled, and the reward of my many kind contributors and of my own efforts is the knowledge that we have done something to alleviate the sufferings endured with such fortitude by the teeming millions of India.

CHAPTER XI

BIG GAME SHOOTING

To many people the word jungle conveys a dense mass of tropical vegetation, trees intertwined with a network of clinging creepers, stagnant fever-breeding pools, snakes and poisonous insects. The whole region, dark and forbidding and ever ready to slay all who trespass on its precincts. True it is that there are jungles of this description in some parts of the world, but the forests of Northern India are more open, freer, lighter, and they grip one with a fascination almost beyond the power of words to suggest. Alone in the jungle, the brilliant green of the foliage, the shadow of the great trees, the many and varied scents, including that delicate and intoxicating perfume of the shisham flower, combine to produce an indescribable feeling of exhilaration and alertness scarcely to be experienced anywhere else. This is due, possibly, to the reawakening of the dormant instincts of primitive man: primitive man who roamed the forest alone in search of food, carrying his life in his hand, inadequate weapons his sole means of defence, but happy in his complete freedom.

You are alone, yet not alone, for you are surrounded on all sides by wild life, with innumerable eyes watching your every movement, the eyes of creatures ever vigilant night and day to elude possible disaster by timely knowledge of an enemy's approach.

And how welcome the relief of escape from the pettiness of everyday existence with its grinding burden of routine — the joy of throwing off a false civilization and getting back to nature — nature untouched and uninfluenced by the hand of man!

An encounter with a tiger is by no means a one-sided affair. Man is aided by lethal weapons but handicapped by the comparatively slight development of his senses, sight, scent and hearing, the slowness of his movements, and his inability to read the signs and signals of the jungle. No weapon could save the most experienced sportsman from the stealthy stalking of a man-eating tiger, or for that matter the charge of a wild buffalo which has been quietly awaiting his approach.

No peace equals that of finding yourself in your *machan* at night. A *machan* is a shooting platform fixed in a tree some eighteen or twenty feet from the ground, surrounded by foliage in such a manner as to screen you from view but at the same time enabling you to command the 'kill'. It may be either a native bedstead borrowed from an adjacent village, or, if you go out shooting frequently, it is better to include in your kit a strong wooden frame about four feet by two feet laced over with webbing like the seat of a chair; this can be fixed by the shikaries (gamekeepers or huntsmen) by means of good ropes in any position.

As you wait in your *machan* the quiet dreamy brooding of the East steals over you, broken only by the vaguely-felt life of the jungle, innumerable beasts on their nocturnal prowl.

The *machan* is usually high enough to be safely out of

reach of the tiger's spring, but if thrills are wished for, it need not be at a height of more than eight feet. Once using a low *machan* I very nearly paid the penalty. It was a dark night and a tiger tried to pull me out by the feet. He was a large beast and had killed two of my buffaloes, dragging them to spots about eighty yards apart. Having failed to beat out the brute, my shikaries were unanimously of the opinion that the tiger would return to the kill on the left. The *machan* was arranged accordingly and I lay full length with my rifle in front of me.

The shikaries and elephants returned to camp about ten miles off and I climbed on to the *machan* about 4 p.m. for my night-long vigil.

Nothing happened until close on 11 p.m., when the tiger came out, not to the buffalo I was covering but to the one on the right, which was impossible to see. There was a crunching of bones for the greater part of an hour, then dead silence. Suddenly I became aware that the tiger was close by, immediately behind and below me. Listening, I could hear his breathing quite clearly and I realized that instead of being the hunter, the tables had been turned on me and I was now the hunted. In such a situation a cool head and a steady hand are imperative or your life is in jeopardy.

The situation was precarious as he was evidently trying to locate me, and the slightest movement or noise on my part would have betrayed my position. Fortunately, the night was dark, and the foliage of the tree kept me in deep shadow. It was impossible to raise my rifle and turn with sufficient rapidity as he would have been on me like a flash.

A lifetime seemed to pass. Then with a terrific roar he moved away, in the worst of tempers, having been harried by the beat earlier in the day.

A tiger takes possession of a large area some ten miles square, and no other will dispute his right to it. It is a curious fact that if a tiger is killed, within two or three days it will be found that another has filled his place. Just in the same way that the dogs take each other's place in Eastern cities. A dog establishes his right to a certain area and no other ventures to intrude.

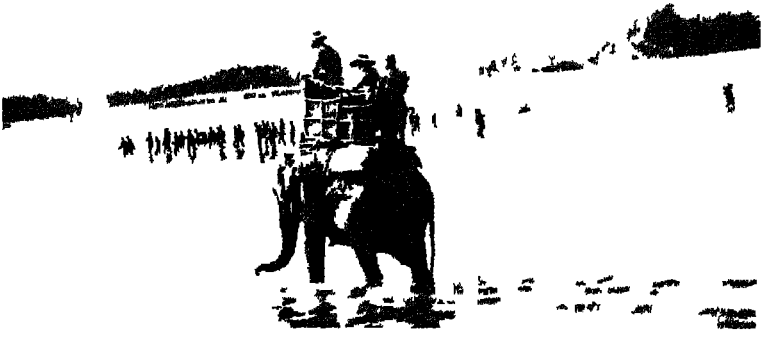
Starting in search of food in the late afternoon and continuing throughout the night, a tiger covers a great distance, and it is something of a problem to decide on the most likely spots at which to place your buffaloes as baits — sometimes you tie up as many as six or seven — but you can generally rely on the judgment of an experienced shikari.

Having decided on the places at which to tie up the buffaloes it is important that nothing should be done to arouse the suspicion of the tiger, and, to obviate all appearance of a bait, it is advisable to tether the buffalo by the forefoot in preference to the neck and at the side of the path under some shady tree, providing him with leaf fodder for grazing — never with straw — to give the impression that he has strayed.

A tiger will always drag his kill near water as he cannot eat without drinking. Cover is also necessary to enable him to remain near the kill to protect it from other carnivora and also to screen it from the sight of birds.

So, if possible, you tie up within easy reach of water, and next morning go on a round of inspection and if a





Above THE AUTHOR SETTING OUT FOR A TIGER BEAT
Below CROSSING THE SARDA RIVER

buffalo has been killed you place your *machan* conveniently and later in the day take up your position.

Generally speaking, a tiger, if not disturbed, returns daily to his kill until the flesh is nearly finished. In the case of a partly-grown buffalo this would be three or four days. Then the vultures, bad-tempered, evil-smelling birds, have their turn, alternately tearing at the carcass and savagely fighting for it with their fellows.

A panther may be bold enough to snatch a meal, but as a rule it stands too much in awe of the 'lord of the jungle'.

Rarely or never will a wild dog do so, as, the tiger being a quiet hunter, and the wild dog a very noisy one, they are seldom found in the same vicinity. A wild dog is an unpleasant customer and has a fiendish habit of eating his victim without first taking the trouble to kill it. In some localities these beasts do so much damage that the government offers a substantial reward for every dog killed.

Wild dogs destroy large numbers of cheetal, or spotted deer, and even sambhar. When not hunting they go about in packs of fifteen to twenty, but when on the trail only two or three are to be seen moving in a leisurely manner thirty or forty yards behind their quarry. The remainder of the pack are posted in a wide circle and take up the hunt like a relay race, till at last the unfortunate deer is exhausted. An ambush may also be laid near water, and when the deer comes to drink they are there ready to attack and tear him to pieces. But it is remarkable that if the deer should succeed in crossing a stream the hunt is not continued.

Peacock is a favourite morsel for a tiger, also pig, so if you are fortunate enough to come across the remains of the latter you should lose no time in finding a suitable tree and arranging your *machan*, as the tiger is certain to return.

I always approached my *machan* in the late afternoon, quietly, taking up my position with the least possible noise. I then proceeded to arrange my rifle, cartridges, etc., close at hand to avoid any subsequent movement or sound. Although the hours are long and the position cramped and there is constant annoyance from flies and mosquitoes to be endured, you are unconscious of weariness or the want of sleep. Too much of interest is going on around you.

From your perch you have many opportunities of studying jungle life. A rustle in the dry leaves may herald the approach of a herd of spotted deer. A hind stands apprehensive on the edge of the jungle with twitching ears and quivering nostrils, endeavouring to detect the slightest sign of danger, but this solitary scout is pushed forward by the advance of the rest of the herd. Suddenly a halt, and, all eyes turning in one direction, the whole herd is rooted to the spot. They have seen the tiger's kill and instinctively know that their arch-enemy is near at hand. Then, just as suddenly, they turn and gallop away to safety at the top of their speed.

The spotted deer is a creature of wonderful beauty with the graceful sweep of his horns and his exquisite colouring — the chestnut coat flecked with white; there is black tracery over the face and white gorget. But, much as I should have liked to possess a good head I have never

succeeded in doing so, for the simple reason that I have always been too absorbed in admiring them and their movements to think of raising my rifle to my shoulder in time for a shot.

They move about in herds of a hundred or more strong, the hinds in advance and the old stags bringing up the rear, at some distance from the herd.

The deer found in the jungles of Northern India are numerous and varied. Besides the spotted deer, those of principal interest are the sambhar, swamp, parka or hog and the kakar or barking deer.

They are most interesting to watch, always on the alert even while feeding. After every few bites up go their heads scenting for danger, which, if present, they take immediate steps to circumvent. If death comes from tiger or leopard, it is usually swift and without a painful struggle, no nerve-racking cries such as are heard from a wounded animal — cries that make you vow you will never again risk a shot unless it is practically certain to cause instant death.

I shall never forget shooting a large brown monkey that had removed two babies from the Maternity Hospital at Agra. They were fortunately recovered without injury. When it savagely attacked and bit the house surgeon I decided to go for it at once. Seizing my gun, I took too hasty a shot, wounding the poor brute, who emitted cries like a hurt child — cries that rang in my ears for days and served as a warning to me to be more careful in future.

Another beautiful and very striking animal is the black buck. He is not found in the jungle, but usually in large

herds in the wide plains. He has one of the finest heads of any antelope in the world. Horns have been recorded up to thirty inches, but personally I have never shot one over twenty-seven inches, my wife, who is an excellent shot, beating me by an inch and a half with a very fine head. The length of the horn depends on age but to a far greater extent on locality. Contrary to the usual belief, the longest horns are not always carried by the buck with the blackest coat. Once in the Mirzapur district I shot an albino buck with a fine head.

A characteristic feature is the graceful soaring bound they make when in full flight and their habit of jumping almost straight up in the air when alarmed. This is done without effort, the object being apparently to get a better viewpoint.

The black buck is the fleetest animal in the world for quite short distances, and the only animal that can catch him is the cheetah or hunting leopard. The usual method of hunting is to take the cheetah hooded in a bullock cart. The buck takes little notice of this country cart so that a near approach is possible. The hood is then suddenly slipped from the cheetah's head and he takes a flying start before the black buck realizes his danger, but even then the cheetah gives up if he has not caught his quarry in a couple of hundred yards, realizing that he has no chance of success.

A buck is inclined to bully the lady of his choice and manœuvres her farther and farther from the herd. He stalks towards her with a peculiar mincing gait, swaying his body and keeping his head well back. The progress of his love-making is signalled by his tail; if satisfactory

progress is being made up goes his tail vertically, but if rebuffed it hangs down in depression. This goes on until a rival buck appears on the scene, when both bucks grunt defiance and proceed to fight it out with their horns, butting furiously at each other with their heads right down.

On one occasion my wife and I stalked to within thirty yards of two bucks in such a fight, and so engrossed were they in the encounter that we could have taken an excellent photograph had it been possible to exchange the rifle for a camera.

While still waiting for the tiger to appear, a mighty sambhar may wander up. If the night is cold and frosty, he has probably just been wallowing in a muddy hollow, covering his shaggy coat with masses of mud. After this icy bath a stag generally rubs his horns violently on the adjacent trees, and in the morning when you descend from your *machan* it is diverting to measure the distance above your head of these marks on the trees, and so get some idea of the enormous size of these stately animals.

I shall never forget the torture of having to restrain myself from firing at a magnificent specimen that came right up to my *machan* during a tiger beat in Nepal, and stood broadside on not fifty yards away. The order was that only tigers were to be fired at; twice my rifle went up, my finger itching on the trigger; but orders are orders and had to be obeyed, although my collection of sambhar trophies contained no head approaching this in size. Not the least trying part was the fact that I knew from the way in which all the other jungle animals were behaving that the tiger had escaped us and was already out of the

beat. That evening in camp talking over the events of the day, expecting sympathy, and congratulations on my restraint, my feelings may be imagined when the Governor of the Province, who had given the order, asked me what I could have been thinking of to let such a trophy escape.

Birds of every description are affected by the sight of the kill, even magpies and ground thrushes, and various quite small birds that flit in and out of the tall grass. But the tactics of the crow give the best inkling, for if the tiger is anywhere near, a crow on sentry-go will be posted over him, and, should the tiger show signs of moving, will utter a warning cry that is unmistakable, and will put all the inhabitants of the surrounding jungle to flight. A jungle cock may strut along to investigate and stand swearing loudly all the time, his comb congested with his angry blood.

Vultures will not venture to alight until the crows have ceased to be on the *qui vive*, for, being heavy birds, they are slow to rise and, like an aeroplane, they need a run before they can leave the ground, during which time they would be at the mercy of the tiger.

Sambhar are common in the Naini Terai, the wooded country at the foot of the Himalayas, but good heads are rare, and they never attain the same measurements there as in Central India, the dry climate of which appears to increase the antlers, while a damp climate increases not only the weight, but the size of the animal, which stands as much as fourteen hands.

Of all the great beasts of the jungle the tiger is without doubt the most interesting, as each one is an individual, and it can never be said, that because the last one you

encountered behaved in such and such a manner, the one you are now waiting for will do the same; on the contrary you feel sure that he will do something entirely different and unexpected. When on the prowl for prey the tiger generally moves with the greatest caution, for when once his presence is realized all animals and birds are on the alert and his chances of a meal become smaller. As a rule he is absolutely silent in his advent and I have been sitting, every nerve tense, waiting for his approach, to find that he has crossed a patch of dry leaves and broken twigs without making the smallest sound. Another will advance roaring loudly and snarling with ill-temper as though expecting to find trespassers on his preserves.

It is wonderful how the stripes of the tiger and the ringed spots of the panther blend with their surroundings. Once in Nepal, when waiting for a tiger which was being beaten slowly to the head of a small ravine, I discovered suddenly that he was almost beside me, so stealthily and silently had he crept along till within only a few feet of me. The combination of the dark shadows and the black stripes and the bands of sunlight with the yellow coat of the tiger made the most perfect camouflage.

Burnt grass also affords excellent cover, as the yellow colour of the grass blends with the black from the charring of the softer sheaths between the nodes.

The tiger is a gentleman — the Lord of the Jungle. He is well-mannered and even-tempered as long as not interfered with, but when annoyed or wounded can become a fury defying description.

Except as a cub, he never kills for the mere pleasure

of killing but is content if he can get an animal the size of a year-old buffalo every six or seven days, and he never begins his meal before the prey is dead. He eats ravenously, skin, hair and bones, crunching up the latter so noisily as to be almost startling in the stillness of the jungle night. The particular one of which I am thinking was the largest tiger of my experience, and when shot a few days later, the tape passed along the curves of the body from tip of nose to end of tail recorded the exceptional length of 10 ft. 4 in.

The tiger is usually a good deal smaller, but I shot one on the Sarda river — the boundary between British India and Nepal — which measured 9 ft. 5¾ in.; she was exceptionally massive and powerful.

As a rule the weight, taken with the skull measurements, gives the best idea as to strength; a full-grown tiger in his prime weighs from 400 to 500 lbs. and the skull measures as much as 15 by 10 inches.

The tigress has from two to four cubs, and until the permanent canine teeth appear at three years of age they are unable to kill the larger animals and so support themselves. A friend of mine in the forest service sitting up on a moonlight night over a kill had the good luck to see a tigress come out with two cubs, which she proceeded to initiate into the art of killing their prey. If they are fortunate enough to escape injury to claws, teeth and pads, they continue to grow in length and massiveness for many years. It is easy to understand that what may appear to be a comparatively slight hurt such as a cut on a pad or a broken tooth may be a serious handicap in hunting and killing, and is frequently the cause of a tiger becoming a

man-eater. Human flesh does not, I think, agree with him and he rapidly loses his fine coat and becomes a poor creature, but this is a point as to which I know all tiger hunters do not agree. It is a habit from which he is unable to free himself. Once a man-eater, always a man-eater.

Many a postman has been taken in wild districts through a man-eating tiger hearing the jingling of the cluster of bells which are attached to a short spear — the postman's badge of office. The man goes at a jog-trot carrying this short spear, which is useless as a weapon, over his shoulder with the mail bag slung across it. In the stillness of the jungle the sound of bells travels far. Frequently a man-eater develops methods of stalking and attacking man which are cunning to a degree.

Sitting up for a tiger may be a lengthy business. Once in the Naini Tal Terai I started to sit up at 4 p.m. and it was not until just before daybreak next morning that the tiger appeared; as he was likely to stay on the kill for some time and the light was not sufficiently strong to give me a good shot I decided to wait. Presently there were a few drops of rain, the tiger was annoyed and growled furiously, behaving like a spoilt child. Another little shower, more growls, then off he trotted not to return until nearly 6 p.m., when the light was beginning to fail and I was thinking of descending and making tracks for camp and food.

I shot him through the heart and he rolled over gently without a movement. This is unusual, as, even when mortally wounded a tiger generally rushes away with tremendous bounds, then turns, finally losing his balance

in mid-air and crashing to the ground. If the wound is not so serious he gallops at first, then breaks to a walk, growling fiercely as he slowly retreats.

In this district I once came across a large boar and a tiger both dead, lying within a hundred yards of each other, both terribly cut and torn, they had fought it out to a finish, neither being willing to give in. A boar is the only animal of the jungle with sufficient courage and strength to stand up to a tiger.

Some tigers are remarkably astute and clever. In a forest block on the Sarda river, which we had for a Christmas camp one year, a tigress kept on killing my buffaloes and dragging them into tall grass which was surrounded by a river on three sides. On the fourth side the grass extended right up the foot of the hills.

Every time an attempt was made to beat her out she cleverly escaped through this side and got away into the hills, no matter which line the guns were put on, or which way the elephants beat. She also had the cunning not to return to the kill for three or four nights.

After she had killed six or seven buffaloes I tied one up on a small sandy beach on the edge of the grass; this buffalo was killed but not dragged into the grass.

For some reason, I cannot tell why, I had a feeling that she would not return to the kill until the fourth night; my *shikaries* laughed at this, but I was determined to stick to my plan of not allowing the elephants to cross the river, having come to the conclusion that she made off directly she heard the elephants splashing through the water.

On the afternoon of the fourth day we were shooting

sambhar some ten miles away, but I made a fast journey across country on an elephant and arrived about a mile from the river at about 7 p.m. From this point the elephant was sent back to camp with instructions to come and fetch me next morning. Having carefully approached the far bank and finding no sign of the tigress on the kill, I slipped quietly into the water and swam across, holding my rifle above my head and two spare cartridges in my teeth. This was a chilly proceeding on a cold night, but my reward was near.

Taking up my position about sixty yards from the kill, with my back to a tree, and in deep shadow, I waited. Suddenly about 9 p.m., in the bright moonlight, there was a movement between the trees away up on the side of the hill. Then after the lapse of a minute or two a magnificent beast came boldly down through the forest, head erect, confident in her supremacy and great strength. She turned into the grass, then after several seconds of suspense she suddenly emerged opposite the kill and advanced on to the sandy beach. I was spellbound by the magnificence of the beast. Up went her head, there was a terrific roar; she had smelt me; instantly I fired my right barrel, but she turned like a flash, I fired my left but felt certain that it had missed; she charged through the grass in great bounds and reached the river just behind me. She splashed and swam across the river, then a crash, followed by a dead silence.

It would have been madness to follow up a tiger in this uncertain light, and I spent a bitterly cold night in my wet clothes under a tree.

As soon as it was light the ground on the beach was

carefully examined but there was nothing to be seen; then, following the trail back, I found bright frothy blood on three or four blades of grass in the first hundred yards. This signifies lung blood and therefore that the bullet must have gone through the lungs. Following up the trail, I found more and more blood.

Then I emerged from the grass on to the bank of the river, and behold, on the opposite bank was the tigress stretched out dead with her tail in the water! What evidently happened, was that she had just sufficient strength to cross the river and reach the top of the opposite bank, and the crash I heard was when she fell, dislodging some loose rocks which fell with her.

Shortly after, the elephants arrived from camp with the *shikaries* and we hoisted the tigress on to a beater elephant and returned to camp triumphant. Very triumphant, indeed, for this was my first tiger.

A big organized shoot is a very different affair to sitting up alone in your *machan* at night. You have a good line of elephants, with or without beaters in addition, and your guns will be posted along the line through which the tiger will most likely break. I was at a shoot in Nepal in which there were 69 elephants in the line and 800 beaters. The elephants are formed up in a line about a mile away and slowly advance towards the guns. In order to reduce the area covered by the guns, men known as 'stops' are placed in trees in an inverted V formation. As the tiger is driven forward by the beat, he is either seen or heard by the 'stops' who tap very gently and occasionally with their stick on the tree. This is sufficient to turn the tiger if he is attempting to get out of the beat and is thus

directed to the apex of the inverted V, and so to the line of the guns.

The tiger when fired at almost invariably charges in the direction in which he is standing, and seldom in silence, his growls increasing into a mighty roar. He will sometimes swerve at the last moment, but if he advances with head lowered he seldom changes his mind, rushing close up to his enemy, rising on his hind legs and holding on with teeth and claws.

As he has a long reach the rider on a 'pad' elephant — that is an elephant without a howdah — is well within his range, quite apart from a spring.

We were once beating for deer with a line of elephants through long grass. No tiger was known or expected to be there. My wife had insisted on accompanying the shoot. She was a real sportswoman and the best lady-shot I have ever met, but in spite of that I was averse to her coming, the risks are so great and add so tremendously to the responsibility of the men. She was in my howdah and after a time complained of the heat, asking to be transferred to a more airy seat on the back of a pad elephant.

I pointed out the possible danger and begged her not to take the risk, but the heat was too great and the transfer was made. Perhaps a quarter of an hour later there was a roar from in front of the line, and I saw a large tiger bounding through the grass and charging straight at my wife's elephant.

Fortunately there was a very fine shot on the left of the line, and he and I fired simultaneously and the tiger rolled over a few feet from the elephant's trunk.

I make no attempt to describe my feelings, but it was the last time my wife accompanied me when the heat was too great for her to remain in a howdah.

The pluck of some women is beyond all praise. The following is a remarkable example. A party were out for a week's tiger shoot, and the man, Jack Campbell, who was running the shoot, was prevented one morning from directing the beat by an attack of malaria, and his wife undertook the task. With great skill Mrs. Campbell succeeded in driving up the tiger to the line of guns, over a mile through heavy grass with the elephants.

Suddenly the beast broke cover. Bang! What had happened! He did not come on! He had been missed, and had turned, breaking back through the line. This consisted of elephants luckily and there were no unfortunate beaters to be mauled.

Mrs. Campbell did not hesitate for a moment. She turned the elephants and took them back to the other end of the beat to begin all over again. An hour and a half elapsed and again the elephants approached. A movement of some shorter grass over to the right, and then with a mighty roar the tiger sprang into the open. Bang! Bang! He was down this time. But what was wrong? Mrs. Campbell's face was all covered with blood and she was evidently in pain. Everyone ran to her assistance, but she was quite calm and merely remarked that the bullet which missed the tiger the first time had somehow hit her. What had happened was that the bullet, having struck Mrs. Campbell's howdah, had divided into two parts; one grazed along her cheek cutting it fairly deeply, and the other penetrated immediately below the eye, and

was ultimately shown by X-rays to be lodged near the back of the orbit where it caused great pain from pressure and was subsequently removed with considerable difficulty. But just imagine the pluck and grit of the woman! To turn the line of elephants without saying a word and to go all the way back and bring the tiger up to the guns again, this in spite of the scorching heat and the pain she suffered during the long interval![1]

How to act if a tiger has been wounded is always a problem. Besides being a danger to the countryside, the poor brute cannot be left to a lingering death. Should the country be fairly open he must be tracked, yourself in advance to protect the trackers in the event of a sudden charge, either on foot, or on an elephant so as to get a more extended view. If the tiger is in grass, a herd of tame buffaloes is obtained from the nearest village. These animals loathe a tiger and combine against him by lining up outside the grass jungle. They advance like a wall, with lowered heads and drive him out. If, however, he is dead or badly wounded they will pound him to pieces and you lose your trophy.

One night I fired at a tiger from a *machan*, with my handkerchief tied round the barrels of my rifle to give the line as there was not sufficient light to see the sights. He made off, but when I examined the ground round the kill next morning, I found parts of his lower jaw and back teeth, poor brute.

[1] A 'modern young woman' who has read this passage in typescript frowns upon my attitude as being that of an old-fashioned sentimental sportsman rather than of a serious-minded physician. 'Surely,' she objects, 'the danger to Mrs. Campbell's life should have outweighed the risk of a day's shooting being spoiled!' Perhaps I ought to plead guilty!

I tried to track him for hours in jungle that made the risk great, but after finding some blood in the first quarter of a mile I never saw a sign of him again, but with a wound of that kind death could not have been long delayed.

Whenever my men hesitated or seemed unwilling to track a wounded animal I made it an unbreakable rule never to press them. With their far keener eyesight, they were better judges of whether it was wise to do so or not. No one could doubt their courage and devotion, or think for an instant it was a case of shirking. If a *shikari* or beater is mauled, one naturally feels great responsibility, as the chance of recovery from tiger or leopard wounds is small.

Accidents while in the pursuit of big game are few and far between with experienced sportsmen, but they occur occasionally even to the most careful. In a beat a great friend of mine whom I shall call Murray did not fire at a leopard which broke cover, to the great surprise of the party. Later he gave it as his reason that he thought the shot too risky in view of the position of another of the guns. Next morning during a general beat a bear comes out directly in front of Murray, who immediately fires. But what has happened? Another member of the party, Hamilton, has suddenly dropped as if shot. Impossible, surely, that he could have been hit! — the line was absolutely safe! But the way he is lying is not reassuring . . . Murray makes a dash for his elephant, which is kneeling down. Why, in Heaven's name? Is it to get a spare cartridge to blow his brains out? . . . Luckily his mahout has guessed this to be his intention and with remarkable

presence of mind has made the elephant stand up . . . Time is thus gained for the rest of the party to rush to the spot and beseech Murray to listen to reason. Poor dear fellow, he is completely overwhelmed with grief and remorse and blames himself over and over again, it is no fault of his — a more careful man never fired a shot. But here and now he takes an oath that never again will he handle a gun or rifle, a vow which he is to keep to the end of his life.

The bullet had gone right through the bear, hit a rock behind and then in some inexplicable way had come back in Hamilton's direction.

The Indian lion at one time roamed over large areas of the north, north-west and central regions of India, but is now confined to the State of Junagadh and is strictly preserved, being shot only occasionally by royalty or a viceroy. He is in no way inferior to the African lion, being alike in general appearance, size and coloration, but is sometimes without a mane.

The lion and tiger, although differing greatly in appearance and in some of their habits, possess practically the same anatomy of short thick heavy bones, and with the exception of minor differences in the skull only an expert could identify the skeletons of the two animals. Both have powerful jaws with large canine teeth for seizing, holding and biting their prey. Both attain the same measurements of length, height and weight, both are the embodiment of the same grace, symmetry and power.

The tiger is the more agile and active of the two, but this may be due to the country he hunts in.

The average man and woman consider the tiger and the lion the most dangerous animals the sportsman can face. They are man-eaters occasionally, but they kill only to eat or in a fight. They do not interfere with their neighbour, thereby showing a superiority over the majority of human beings.

Both are, of course, dangerous when interfered with and will fight like demons, especially when wounded. I have been charged by a tiger after he was hit by four bullets in the shoulders, and when his skin was removed the bones were so broken up that it would appear an impossibility for him to have moved. On the other hand I have been within a few feet of a tiger and he has been just as keen on getting out of my way as I was of avoiding him.

A leopard compared with a tiger is a clean feeder. Instead of taking mouthfuls of hair as the latter does, he folds the skin back tidily as he eats. To save his kill from vultures he will carry it to the higher branches of a tree, where there is no room for the birds to move about, or if he finishes it before dawn he will cover the remains with dry leaves to screen it from observation.

A leopard will sometimes begin his meal before killing. One morning when visiting my buffaloes, tied up for tiger, to my horror I discovered one poor beast with his hind quarters partly eaten and still alive. I swore vengeance on the leopard who had gone for him, and at once laid my plans. Returning to camp for breakfast I came back to the dead buffalo about 1 o'clock, as a leopard generally returns to the kill much earlier than a tiger. Concealing myself in a bush with an additional screen of

undergrowth, I waited. About 2.30 p.m. he appeared, coming very cautiously along a little forest path; he was suspicious and at one time concealed himself for over an hour, then he reappeared and eventually hid in a patch of grass about sixty yards from the kill.

Another long wait. Then the tip of his nose showed. He remained absolutely still in this position for quite fifteen minutes, then I saw his head and finally his shoulder, at which I promptly fired. He sprang straight towards me, although I do not think he had any idea of where I was hiding, tore along down the hill immediately behind me and disappeared in the bamboos.

My *shikaries*, who were waiting about half a mile off, came up on hearing the report, and were emphatically of the opinion that I had missed, but from the way the beast behaved I knew he was badly hit. I suggested that we should start tracking at once, but they wavered; it was a winter afternoon and in the thick jungle the light was already waning, so I called them off and we returned to camp.

No praise is too high for the general run of Indian *shikaries*. Their courage, loyalty, patience and cheerfulness, no matter what difficulties and hardships are encountered, are qualities which engender a lifelong feeling of confidence and admiration.

Early next morning we were back with a pad elephant and started on the trail. The leopard was found under a clump of bamboos not two hundred yards from where I fired. The wound was interesting, the heavy ·475 bullet had entered the chest through the shoulder and caused such pressure in that cavity that one lung had been

completely forced out of the body and was hanging by its root. The buffalo was avenged.

The leopard was hoisted up on to the elephant and we were preparing to return to camp, when we found that the surrounding jungle was alive with monkeys. They crowded on to the trees close to the elephant, they seemed to swear at the leopard, spat at him and shook their fists, screaming with anger and shaking the bamboos violently in their hysterical outburst.

This enraged crowd accompanied us for several miles. The leopard had doubtless killed numbers of them and this was their method of showing joy at his removal.

Sticking panther — as we called the larger kind of leopard — with a hog spear is a dangerous sport, as a wounded panther is most ferocious; a friend of mine missed one with his spear as the beast charged and the animal got home, penetrating the knee-joint with his teeth; after weeks of efforts to try and save my friend's limb I had to amputate at the hip joint to save his life.

I had an interesting experience with a panther during a thunderstorm in the Himalayas. These Himalayan storms are of great violence, the thunder is terrific, the rain torrential, and blue lightning appears to run over the ground in every direction. The storm overtook me in a forest and I stopped under a tree. Hardly had I done so than I knew instinctively that there was danger. Keeping absolutely still, I turned my eyes in every direction but saw no sign of anything unusual; then gradually looking up, not three feet above me, I saw stretched out full length on a branch a large panther. I was unarmed, and

to beat a hasty retreat would probably have meant disaster. Fixing the brute with a steady stare, I moved very slowly and steadily away without daring to take my eyes off for a fraction of a second. Fortunately he did not follow. The sensation of knowing there was danger, and not being able at first to locate it was interesting and impressive.

Panthers frequently break cover when you are beating for deer, bear, etc., but the usual method of getting a shot is to tie up a goat, and the sportsman takes up a commanding position, either from a *machan* or behind a screen of branches on the ground. The goat must be brought to the spot and tied up by one of the *shikaries* after you are in position, as otherwise, knowing he has a friend at hand, he will not bleat. The shrill bleating carries through the jungle for over half a mile, and is heard by the panther just rousing from his sleep.

Tigers and panthers rarely spring directly on to a tethered animal, being suspicious of a trap.

Suddenly there is a rush — and the panther springs, landing in front of the goat, which stands transfixed with terror. You must instantly get in a shot, otherwise the panther will kill the goat, and you will curse yourself for your slowness which has caused the goat's death.

Then you approach the goat which sidles up to you with a strange friendly kind of bleating, and, following the trail, you find blood, and the panther dead within a hundred yards if your aim was true. If nothing is found within that distance you return and wait for your *shikaries* to track; you must move warily, as a panther, concealing himself in the smallest hollow or patch of grass, charges

without the warning roar of a tiger, and may be on you before there is time to raise rifle to shoulder.

A man-eating panther is fortunately rare, but when a panther does take to human flesh he becomes a curse indeed. About 1912 there was a panther in the Almora district which within a period of four years was known to have killed and eaten as many as 433 people, the great majority of whom were women cutting grass and collecting fuel in the jungle.

A man-eating panther becomes even more cunning and sly than a man-eating tiger: a whole battalion of Gurkha rifles was at one time employed hunting down this particular one without success. Eventually he fell to the rifle of a well-known local shot.

A panther generally takes to man-eating when he is getting old, or has lost some of his quickness and agility through injury in a fight.

Dog is perhaps his favourite food. He springs and with one bite severs the dog's carotid arteries. One winter afternoon at Naini Tal when out for a walk with my wife and an Airedale, we were most persistently followed by a panther, and it was only with difficulty that we succeeded in getting the dog safely home. Many a faithful friend has been saved by his master providing him with a broad spiked collar. The panther thus defeated beats a hasty retreat. Even in other circumstances, curiously enough, he will at times run from a dog. Wild dogs frequently drive a panther off and steal his kill.

An elephant is not only a most lovable beast, but of invaluable assistance in sport. I had a pleasing

experience of his courage once when a tiger which had broken from a beat was missed by the first and second guns. He came bounding through the grass and I missed both barrels. Realizing that he would probably get right away, I seized a light rifle and fired a shot which was calculated to fall about twenty yards ahead of the beast. This had the desired effect, and the tiger turned directly back in my direction. I at once picked up my heavy rifle in preparation for the charge, but imagine my consternation on finding that the breech had jammed and could not be forced open!

The elephant at once realized that something was amiss and that he was in for a terrible mauling. No panic, not even a quiver of his great frame! All he did was to lower his head with the object of receiving the tiger on his forehead, when he would have knelt and endeavoured to crush the beast between his forehead and the ground. Fortunately our luck was in, as the tiger came down the far bank of the dry river bed, on the opposite side of which we were standing. With a last effort the breech of the rifle flew open and a shot stopped the tiger within a few feet of the elephant's trunk. Then, and then only, did he tremble.

With all his courage in most circumstances, it is curious to see how terrified an elephant is of a porcupine. The sharp needle-like quills are capable of piercing his hide with ease, and I have known one porcupine break up a line of seventy elephants.

The elephant is a lovable beast and pathetically grateful for kind words as I have said. He will submit to the severest surgical operation — with many groans

certainly — but he understands that it is for his good and carefully restrains from hurting the operator in any way. His memory is long, however, and woe betide the man who wantonly illtreats him.

I knew of a mahout who in a fit of temper deliberately injured an elephant. The Nawab, whose servant he was, dismissed him, considering it unsafe for him to remain. No less than twenty-two years later, as the man returned and was starving, the Nawab agreed to take him back, but that mahout had not been in the stable two minutes before the elephant seized him in his trunk, threw him violently on the ground, and pounded him to a jelly with his forefeet.

Some thirty years ago there were elephant batteries in the Indian army, two to each heavy gun. They were most picturesque on ceremonial parades, raising their trunks in salute during the march past.

The elephant's most important work nowadays is in Burma in the teak timber trade. He drags the logs out of the forest to streams down which they float to the saw-mills, and he builds up the sawn logs in stacks quite symmetrically, and will step back to see if the great balk he has just placed in position is accurately aligned.

In the wild state he dominates the forest, having no fear of other animals and little of man. The rhinoceros is the only beast that would dare to force a fight; a tiger will attack him only when wounded and maddened with pain.

The wild elephant is very destructive. I once followed up a large herd and the broad track of their advance was absolutely flat. They are the noisiest inhabitants of the jungle, what with the constant sound of breaking wood

and the tearing down of bamboo clumps, done to enable the calves to feed on the leaves, the fodder they most appreciate. Add to all this din the frequent trumpeting of the females and the shrill squeaks of the calves. During the summer months the herd is to be found where there is green grass in the shady nullahs and ravines, but in winter they resort to the bamboo jungles, and at night they make for water to bathe and drink.

The 'tusker' usually follows the herd at some distance, and is a fury, or comparatively docile, according to the mood he happens to be in; if he is heard smashing down branches and uprooting young trees, he is in a bad temper and best avoided.

A tusker, when the hunter approaches, stands still and silent; and, having thickly plastered his body with mud and covered his head with grass as a protection from the burning sun, he is well camouflaged, and even so large a beast is at times difficult to see until you are close upon him.

He is well provided with weapons for attack. The tusks are used to gore another tusker he has felled, after a duel of pushing forehead to forehead, or he may be content with pulling out his adversary's tail. Many wild elephants are tailless; in the males it is a stigma of defeat, and in the females a sign of resistance to the advances of the male.

With his trunk I have known an irate tusker throw a poor old woman, whom he met in a forest track, over the top of the surrounding trees, and lift a bear right up, throw him violently on the ground, and pound him flat with his forefoot. He also strikes out with great force

and accuracy at anything coming within reach of his foreleg.

But in spite of their great strength and size they are delicate animals, liable to become lame, and suffer from the sun and heat, and to rapid collapse from haemorrhage from severe tiger wounds. Once I lost an elephant from anthrax in the jungle, and the work of burying him was a herculean task.

If a wild elephant is dangerous to human life or causing great damage to crops and villages, he is proclaimed a 'rogue' and a reward is offered by the Government for his destruction. The safest way to approach him is on foot, and if possible on a slope, as it is impossible for him to move quickly across a steep gradient; or to climb a bank. But he will come down on you like an avalanche from above by simply kneeling down on his hind legs and letting himself go. The shot should be made with a ·475 or ·500 high velocity rifle, the object being to reach his brain by aiming behind the ear.

Speaking of rifles, it is never safe to use a small bore for big game, it has not the necessary stopping power. Personally I always used a ·475 double-barrelled high velocity rifle with a cordite charge and a heavy bullet of the 440-grain type, which was capable of 'setting up' into the form of a mushroom when it entered the animal's body.

The method of catching elephants in Northern India is by a lasso thrown over the head of the wild animal from the back of a tame one. In other parts of India and Burma it is by *keddah*, that is, the wild elephants are rounded up by tame ones, and driven into a strong stockade; after

being starved for a time, powerful tame elephants are admitted to the enclosure, one on each side of a wild elephant bullying him to submission. The females and calves as a rule make little fight against capture. Sometimes an attempt is made to take a tusker, but rarely is a useful full-grown male obtained, as, if he survives the injuries of the battle, it is impossible to tame him.

I have had some interesting experiences wandering about the jungle in low hilly country on an elephant in search of game. One day a bear suddenly appeared between two trees 150 yards away, and although he was a difficult shot I took a snap as there was little prospect of seeing him again. He beat a hasty retreat, apparently unhurt. Feeling there was something unusual about the matter I got down from the elephant and went to the spot where the animal had stood, to find a long line of his coat on the ground as though it had been cut off with scissors. The bullet had evidently travelled down his back close to the skin and cut the hair.

There are two kinds of bear in India, the red and the black, though the red is becoming more and more scarce and is only to be found in the more remote parts of the country like Kashmere. Many years ago, when in camp on the road to Gilgit, I heard a tremendous noise in an orchard a short distance from my tent, and, creeping quietly up in the moonlight, I counted no fewer than seventeen bears enjoying themselves, eating the fruit, and fighting with their neighbours.

The black bear is a clean feeder, living on roots, honey and fruit. He is especially fond of mulberries. Occasion-

ally he kills a young goat. In some hill districts bears damage the crops to such an extent that the Government offers a reward of 16 rupees (£1) for every skin brought in. The *tehsilder*, or Indian magistrate, receives it, cuts off the ears and restores the skin, in addition to the sixteen rupees to the man who brought it. The ears are cut off as a safeguard against the reward being claimed a second time.

They can be nasty customers and inflict ghastly wounds with their claws, especially on the head and face. I once saw a bear rush at a man from behind and pull off the whole scalp which literally hung down his back. Yet he made a rapid and good recovery, the terrible wound healing well. A bear's wound is clean, his claws not being contaminated with putrid meat as in the case of a tiger or panther; and it heals well if properly treated.

Another man running away was caught from behind. Planting his two paws on the man's shoulders, he drew his claws down the whole length of the man's back to his buttocks. It was a ghastly wound, like the furrows of a ploughed field, but in this case the man recovered, there being no serious sepsis.

In the remote districts where the mauled cannot, or do not come in for treatment, the mutilation of the face heals but leaves cicatrices and contractions that are sometimes grotesquely horrible to behold.

When after bear, always remember to keep above him if possible, as, clumsy as he appears to be, he can come down on you from above with extraordinary rapidity. They are hunted either by being driven up to the guns by a line of beaters working through a long track of hilly

country; or by elephants beating through grass, or by waiting for them by moonlight under the mulberry trees.

I was out early one morning in the Naini Tal district on the look out for bear returning from their night's feeding, when I spotted a large one in a tree on the opposite side of the valley. Between us was a swift mountain torrent running between precipitous banks and it was impossible to cross for a shot. The nearest I could get was about 350 yards and, lying down on a ledge of rock, I took careful aim; the moment I fired, the bear coiled himself into a ball and dropped plumb out of the tree, rolling down the hill through the bushes and out of sight. Though I had read of bears going through this manœuvre I had never seen it till then.

I was unable to discover whether he was hit or not, but my impression was that the shot missed, and that he employed these tactics merely to make a hasty retreat.

The older books on India speak of pig-sticking taking the place of bear-sticking owing to the supply of bear becoming limited. However that may be, it is seldom that you find a bear in rideable country.

With the exception of the species arboreal in their habits, snakes are rarely seen in the jungle, as in the cold weather they hibernate in underground holes, and in the hot weather are nocturnal. The python, measuring eighteen or twenty feet, or more in length, is found all over the forests of Northern India; this is a sluggish reptile and fond of swampy ground as well as trees, which it inhabits with the object of dropping on its prey passing underneath. In addition to a sharp bite it strikes a heavy

blow with its head, stunning the animal before coiling round the body and crushing out the life.

Cobras are common, especially in ruined houses or temples, but they make such a fuss and hissing that they are easily avoided. In this they are unlike the deadly krait, the colouring of which blends with the most ordinary objects and is not easily seen. I had an unpleasant experience one evening when my wife and I found one lying near the brushes on her dressing-table. We rushed off in search of sticks to dispatch it, but on our return it was no longer there, and in spite of a prolonged search we found no further trace, which was unsatisfactory for, being a small snake, it might easily be concealed and escape our notice.

An officer of my service, Major Lamb, studying cobra venom was bitten in the finger when about to press the poison out of a cobra's fangs into a spoon held in the snake's mouth; he did not hesitate a moment, but putting his finger on the edge of the table, cut it off with one blow.

Late one afternoon during the rains, when snakes are more prevalent, being flooded out of their holes, my wife had accompanied me to inspect a hospital about thirty miles from Agra. On the way back we spotted a large herd of Indian antelope and my wife was anxious to have a shot at an especially good head. After stalking it up she fired and wounded. I saw this and, hastily pulling off my coat, in the hurry I dropped it on the road. This haste was necessary as the light was fading, and I was anxious to follow up and put the poor beast out of its pain. Having shot the buck and secured the head, I returned to the car. It was then dark, there being little or no twilight in India.

Picking up my coat I thrust my arm through the sleeve, and immediately felt as if two electric wires had struck me on the back of the hand. Rushing round to the head-lights of the car I saw that there were two puncture marks; we then rapidly looked round to see what had bitten me, but in the darkness whatever it was had disappeared.

The position was alarming, for I had no means of treatment with me, and the nearest help was twenty-five miles away. At first I thought of blowing a hole through the two puncture marks with my rifle, but decided that the snake might be non-poisonous, and that in any case this might be ineffective while it would cripple my hand for operating work. I then decided to take the wheel myself and drive the car as quickly as possible back to Agra, but I knew quite well that, if the snake was poisonous, collapse would take place long before we reached home.

My arm now began to swell and was painful, but we reached Agra without serious symptoms. For the next three days I felt unwell and my arm was considerably swollen right up to the shoulder, but after that all the symptoms rapidly subsided. To this day I have no idea as to what bit me, but it was an experience not easily forgotten.

There is one very dangerous snake in the jungle, and that is the king cobra or hamadryad, but fortunately he is comparatively rare, and as a rule the jungles in which he is likely to be met are known and a warning is given by the Forest Department. A forest in which there are known to be hamadryad should never be entered without a shot-gun, this being the best weapon with which to repel an attack. They are big snakes from 7 to 11 or even

12 feet long, with large fangs, and the bite is rapidly fatal. I have only come across two, and one was when in a train passing through a forest. The hamadryad was on the railway bank and was greatly annoyed at the locomotive.

Tall stories are told of the way in which this snake will attack and follow up. One of the best is that of an officer in Burma who was so persistently followed that he took a year's leave, but on his return from the year's furlough found the snake waiting for him on the platform!

The two species of monkey most commonly met with in India are the brown and the langoor or silver grey monkey with a black face. The brown variety is found everywhere; he infests the cities, causing the inhabitants endless trouble and loss; he invades the houses, carries off food, upsets pots and pans and damages roofs and buildings, but being considered sacred by the Hindu it is contrary to their law to destroy or permit others to destroy him.

What Hindus will tolerate from monkeys is almost incredible. Some years ago in Muttra I had to amputate at the shoulder the right arm of a professional wrestler; the man was sitting, sunning himself on a high wall, when a monkey out of pure devilry pushed him over, with the result that his right arm and forearm had no less than four compound comminuted fractures.

On another occasion a little girl was walking down a street, also in Muttra, about eighty yards ahead of me; she was wearing a massive silver chain round her waist. Suddenly a large brown monkey dropped from the eaves

of a house by the side of the child, seized her chain, and shook her backwards and forwards with such violence that if I had not run to her rescue he would probably have killed her, such was the strength of his attack.

Sitting in my office one morning at Mirzapur I noticed a pretty little girl crossing the road with a large basket of chappaties — unleavened bread — they were just freshly cooked and smelt very appetizing. A brute of a monkey dropped out of a tree, caught the unfortunate child a heavy blow across the face, knocking her down, and then proceeded to turn over each chappatie, and having selected two of the best tucked them under his arm, and was making off when a crack from my stick made him drop his plunder.

Occurrences such as these happen every minute of the day, and there is no limit to the loss and inconvenience that Hindus will tolerate from monkeys.

As a member of the municipal councils of several Indian cities from time to time I have had experience of all manner of measures that have been adopted to deal with this pest, short of killing.

One method was to trap large numbers and send them to a distance by train, but unless the distance was considerable they generally found their way back.

Monkeys from different localities, or jungle and town monkeys, will fight until both sides are practically exterminated. This fact we made use of more than once, a train load of jungle monkeys were trapped and brought into the city. A furious battle raged and hundreds were killed. As long as a monkey met his death at the hands of another monkey the Hindus had nothing on their con-

science, and we were thus able to rid the city of a large percentage of its pests. At Agra the brown monkeys were always damaging the hospital buildings, tearing off the tiles and throwing them on the ground; in one morning they did 600 rupees worth of damage to the roof of an eye-ward, and steps had to be taken to stop it. So a langoor was purchased and he quickly rid the precincts of his brown enemies.

This langoor certainly did his duty, but after a time he became rather aggressive and was fond of grasping me tightly round the legs just below the knees.

There was a large church not far from the hospital grounds, and one Sunday morning he raided it, turned out the congregation and choir, and then attacked the clergyman who was in the pulpit, and who had to beat a hasty retreat. This padre was a friend of mine and a good sportsman. Next morning he wrote and told me of the raid, and added that it would not have mattered so much, but for the fact that his text was 'Be not afraid'.

A drive of thirty-four miles west of Agra brings one to the City of Bharatpur. The immense mud ramparts captured by Lord Cambermere on January 18th, 1826, still stand as a monument of the desperate resistance.

We had been invited to the world-renowned duck shoot by His Highness Maharaja Kishen Singh, whom I had treated on several occasions and also through a severe attack of influenza in the great epidemic of 1918.

The shooting area is a partly artificial lake some six miles long and two miles in breadth; running down the centre is an embankment with a motor road leading to a

small island near the centre. From the main embankment other embankments branch off laterally on which the majority of butts are built; there are also a number of island butts.

The lake is only about two or three feet deep and is covered with patches of rushes and other cover for the duck.

His Highness generally gave two shoots every year, one for the Viceroy, and the other for the Commander-in-Chief; on this particular occasion it was the Viceroy's shoot and there were a number of important members of the Government of India and Indian Princes.

We were met on arrival by officials of the State, and each guest was handed (1) a plan of the lake showing the position of each butt, (2) a printed list showing the names of the occupants of each butt, and (3) a plan of the luncheon tent with the seat of each guest at table.

My own car parked, a State car took me half-way along the main embankment to the nearest point to my island butt, where a boat was waiting with five men. A headman (*shikari*) and four more, with well oiled and greased bodies, remain in the water and retrieve the duck.

They then rowed me out to my butt, which was densely screened, on a small island; inside the butt was found everything possible for one's comfort, a swivel seat, containers for cartridges at a convenient level, a basket of fruit and bottles of soda-water.

Having unpacked cartridges and settled in, the position of the surrounding butts located, and a mental note made of their occupants, everything was ready for ten o'clock, when a bugle was to sound 'Commence fire'.

All round were duck of every kind and description, swimming close up to the island and apparently quite oblivious of the coming slaughter, the open sheets of water between the islands and reeds black with them, and dotted about here and there in the water elephants with *shikaries* on their backs to keep the birds on the move.

I looked at my watch — just on the stroke of ten! Bugle! A shot — then one or two more shots. With a noise like a rumbling of distant thunder thousands upon thousands of wildfowl rose, the air was black with them, and shot after shot rang out from every butt.

A great goose flew over my butt, a shot brought him down directly into it, and I had difficulty in avoiding his fall, but I am a poor shot with a gun and did not bring down a tenth of the birds I should have done.

Bang! Bang!! Bang!!! The young Maharaja in the butt on my right front was a fine shot; he had five guns and two loaders and is said to have fired close on a thousand cartridges before lunch. At any rate he had the largest individual bag of the day — 303 birds.

Boom! Boom! What was that dull booming in the distance heard now and again? — the firing of the Maharaja's batteries, which had been sent out with companies of infantry to three or four lakes in the different parts of the State to which the birds fly. The firing was to scare them off in the hope that they would return to the big lake and the shoot. Now, the birds were not coming over so thick and fast, and after the first few minutes they had been high, and difficult shots.

Bugle! 'Cease fire!' One o'clock and lunch time. I got into my boat and the men rowed me to where a

car met and carried me to the island at the end of the motor road.

Here were spacious retiring tents, and it was refreshing to get a good wash and some cold water over the back of one's neck, as, although the mornings and evenings are very chilly at this time of the year, the middle of the cold weather, the sun at midday strikes down with considerable strength.

After an excellent lunch we strolled outside to inspect the bag, line upon line of every kind of duck.

At 2.45 we returned to our motors, and were driven back down the road to points opposite our butts. At 3 o'clock the bugle again sounded 'Commence Fire', and the guns continued until dark.

Then with a liberal number of duck heaped into your car you drove home with that wonderful feeling of contentment that only a good day's sport is capable of giving.

We learnt next day that the total bag was 4254 for 48 guns, a marvellous day's sport and a record even for Bharatpur.

CHAPTER XII

PIG-STICKING

AFTER a hard day's work in crowded offices, courts, and hospitals, we drove out, six friends of mine and I, some twelve miles, in the divine Indian evening, to our camp on the banks of the sacred Ganges, where, the following day being a holiday, we hoped to indulge in that truly magnificent sport—pig-sticking, second to none, not even tiger-shooting.

The road is typical of the Mirzapur district, bordered with a fine avenue of trees which gives welcome shade to the traveller and protects the metalled surface from being broken up by the fierce rays of the sun.

At first it skirts a large pool with *dhobies* washing clothes by beating them forcibly against large flat stones on the water's brink; at another corner the women of the village are washing their shiny cooking pots and pans after repeatedly scouring them with soil. The vivid shades of their bright clothing show up against a background of green banana clumps and add a pleasing colouring to the scene.

Farther on, we passed a wayside well, and there floated to us on the still night air that not unpleasing sound, the creaking of the Persian wheel, and the splash of water drawn from the depths of the earth by large grey bullocks. A *bhisti* (water carrier) stood on the parapet filling his

water skin and carried it away dripping on his brown back.

On either side the village fires were aglow for the evening meal, and the pungent-smelling smoke lay in low grey wreaths so characteristic of the Indian atmosphere.

On arrival at the river bank, standing by a mosque, where the muezzin was calling the faithful to prayer, we found the head *shikari*, Mohammed Bux. He reported a *bahut bhari sui* (a very big boar) in a patch of sugar-cane east of the village of Puchwa, but we had heard this story many times before, and the *shikari's* assurances left us frankly sceptical. This, however, did not damp our ardour, and we plodded a mile across the vast and now dried up bed of Mother Ganges to a strip of water on the far side, where a ferry boat paddled us to the opposite bank. Another walk of half a mile and then suddenly loomed ahead a row of seven mosquito nets. Our *shikaries*, syces and bearers had preceded us with our hog-spears, horses, and camp beds, and made our camp on the outskirts of a *Mango Bagh* (grove).

After an excellent dinner such as only Indian servants can produce in camp, we turned in, as an early start must be made in the morning, and we would have to be stirring before 5 a.m.

Stretched on my camp bed I enjoyed the wonderful beauty of the Indian night, the moon lighting our camp as if by day, but falling in softer shadows between the trees, and on our horses picketed over to the right. The cooler night air, so soothing after the heat of the day, induced a great feeling of peace and contentment in me as I lay counting the stars till consciousness slipped

away — for suddenly — my bearer standing by my bed announces that it is already day, and hands me a most comforting cup of tea.

The whole camp astir, syces rubbing down the horses, orderlies making a final inspection of saddlery, especially looking to the reliability of girths and stirrup leathers, on which their Sahib's life may depend. A welcome smell of porridge and of eggs and bacon drifts down from the mess table.

Away on the outskirts of the camp the beaters are collecting from the neighbouring villages, marshalled into long lines by the *shikaries* and then sitting down placidly on their haunches.

On a word from the head *shikari* every eighth man stands up and receives a token, which may consist of anything from a special tin disc to a brass cartridge-case. At the end of the day's sport this man delivers up his token and receives in exchange a rupee which he divides with the seven men on his left — twopence each. This seems a small wage but they are more than satisfied, the day's sport being indeed to some a greater reward than the money.

Breakfast over, the *shikaries* moved off to the first beat, with the lines of beaters and the three elephants. One of the elephants carried on his pad crates of soda-water bottles. Loosely packed in wet straw, the enormous allowance of twenty-one bottles per man. Without all this liquid the day's sport would be impossible, as after a good run, a bottle or two is necessary before you can speak — such is the heat.

There was time for a smoke while the beaters got into

position, and the seven riders divided into three heats — two, two, and three — and we drew for our places.

My three horses, Paddy, a big bay waler, until recently the first charger of the colonel of a well-known Dragoon regiment; fast, a wonderful jumper, and very staunch to pig.

Melford, a chestnut waler, very fast, an excellent jumper, but not very staunch, having been badly cut the year before by a big boar.

Strawberry, another waler, is remarkably handy, a good stayer, but without a great deal of speed.

Our first beat was a series of sugar-cane fields, giving good shade and cover for a pig. I mounted Paddy and we moved off, taking up our positions. There was a feeling of exhilaration in the morning air, scented with the fragrance of flowering bamboos. Mounted on a good horse, with the prospect of the finest sport in the world, the joy of life thrilled through and through.

Now the head *shikari*, Mohammed Bux, has seen from the howdah of his elephant that the 'heats' are in position, and gives the order for the line to advance. Suddenly there breaks forth a great din of tomtoms and yelling — and the beat has begun.

The atmosphere is tense with suppressed excitement. The horses, heads up, ears cocked, nostrils wide, ambling round and round, keyed up to dash away like a flash. A couple of hares dart out of the beat, and both men and horses start involuntarily, such is the pitch of anticipation.

A shout from the left of the line, a sounder (family of pig) has broken cover and No. 1 heat is away riding

hard, but after two or three hundred yards they cross their spears and return to their position, which means that there is no rideable boar.

Woof! Woof! There was evidently a good boar in the beat and just as Motilal, the big elephant, came through the last patch of sugar-cane, a fine boar broke — 35 at the shoulder, if an inch — and made off to our left.

No need to spur Paddy, he bounded into the air and we were away hot on the trail of the boar whose objective was an arrah field in the distance. He was a fast boar and going strong, but Paddy was all out and we were hard on him, gaining every moment, but he suddenly jinks to the off, I shot ahead. My No. 2 behind me was now on his line and riding hard, but just as he was leaning forward to spear, the boar jinked again and No. 2 came down; but seeing he was not hurt I rode on, to get in a good spear behind the shoulder, but the powerful brute did a quick turn and wrenched the spear out of my hand.

We were now both powerless to attack the boar because of my spear sticking deep through his chest with the weighted butt end waving in the air, and because I was spearless. The boar knew he could not charge me without gaining control of the spear or shaking it out; realizing this, he moved to a slight clearing in the jungle and stood shaking, shaking violently, in order to get the spear low enough to grasp in his powerful jaws.

The courage of this plucky beast! Imagine! — shaking down a spear that is sticking through your chest. . . . Shake! Shake! Now the shaft of the spear was low enough and taking a firm grip of it between his teeth he turned to charge me, with the butt of my spear projecting

far beyond his massive head. But a syce had run up from behind and handed me a spare spear. The boar charged, I galloped in, spear well down, and we met at over seventy miles an hour. Crash! A cloud of dust, a gush of blood spurted up, and my fight-it-out antagonist was dead. For years this spear, with the bamboo shaft deeply dented with his toothmarks, has hung in my house — in honour of the courage of this great boar.

We were now back at the spot where the beat finished, the riders busy quenching their thirst with ample draughts of soda-water or lemon-squash, and the beaters with water from a near-by well. Six of the beaters were struggling in with my boar, his feet tied together and a stout bamboo pole passed between his legs. Slung in this manner, he is carried in, the bamboo resting on the men's shoulders.

Between two beats, while sitting down for a drink and a brief rest from the saddle, we had just in front of us a double bank and two ditches. We began a discussion as to whether a horse could jump it or not, and finally we all agreed that it was an impossibility.

About half an hour after I was riding a boar, when it suddenly flashed across my mind that Paddy and I must be near this impossibility. Looking up, I saw it right ahead — no time to draw rein — Paddy went straight at it and cleared it like a bird. So much for the impossible!

The *shikaries* now collected the beaters, getting them into line for another beat. This was a succession of bamboo clumps, intersected with small ravines, giving water and good shade. A paradise for pig to lie up in.

Mohammed Bux sidled up and murmured 'Sahib! *Bahut bhari sui hai!*' (There is a very big pig!) but we were not convinced. The beat began. Crash! Crash! The elephants tearing down the bamboos as they passed by, to get some fodder, a difficult beat, this, for the *shikaries* to keep a good line on, on account of the broken ground and large groves of bamboo.

But we had not long to wait! A violent movement of the tall grass on the right, and now out trotted an enormous boar, the largest boar any of us had ever seen. Yes, the *shikari* was right!

An old grey chap, with all the bristles off his back. No run for him! He felt equal to taking us all on, and meant to fight it out here and now, on this very spot.

He stood still, looking round and surveying his enemies. Then, his mind made up — the first charge! Crash! In he came, round and round we went, clouds of suffocating dust obscured the view, but we met, charge after charge with spears well down.

This was to be far from a one-sided fight; two horses badly cut limped from the fray. The boar jumped at another rider, cut his stirrup leather through, crushing his leg. Still the battle continued, round and round we went. Ah! Now hesitating, he totters, then stumbling to his knees, he slashed furiously at the ground, ripping it up with his razor-like tusks. One of us, riding in, gave a merciful thrust to the heart, and his gallant life was over.

A great end to a magnificent fighter: we crowded round to admire his strength and size. I cannot remember the exact weight, but I know that he turned the scales by far the heaviest pig in the log book of the Tent Club.

Two or three more long drinks to wash down the dust and off again, this time for the last beat. We had been in the saddle for over seven hours, and the horses were nearly done, with the heat around 112 degrees in the shade. But dry heat, intensely dry and therefore much more bearable.

The beat was through arrah fields. Riding through this kind of corn one sometimes sees a heap of cut crop, and at first sight it appears to have been cut by the cultivator, but this is frequently done by pig to protect themselves from the heat of the sun, and a good boar may be passed as he lies completely hidden.

The line moved steadily forward, but the beaters had had nearly enough, when suddenly Woof! Woof! and a good boar broke on my right. Strawberry and I press him hard before he had really had time to get into his stride, and after a short burst of speed I got in a fair spear behind the shoulder, but he jinked sharp off to the right and for some moments was lost to sight in the crops.

Then suddenly I spotted him, making off quietly through the arrah for a short open stretch beyond and sanctuary in a deep nullah, which, if he succeeded in reaching, he would defeat me by scrambling down the steep sides where a horse could not follow.

It was a neck-to-neck race to the nullah. The boar heard me coming hard on his trail and strained every muscle to increase his speed — on we galloped — nearly level now, but the nullah loomed ahead, I leant well forward in the saddle and speared. Crash! The boar had turned into Strawberry's forelegs as I speared and we all came down together.

Ye gods! I was not hurt in any way, as the ground was soft, but Strawberry was completely stunned, and lay across my thighs and legs pinning me down. I was unable to move. An unpleasant moment.

The dust cleared. The boar, not twenty yards away, pulled himself on to his forelegs — looked round to try and find me, but at first did not see me lying under the far side of my horse.

Then he spotted me — Good Lord! what a death! Disenbowelled by those white razor-like tusks and then ripped to pieces!

He struggled on to all four legs — yes, but with difficulty. He was badly wounded. Can he reach me? Even now I can see those small cruel bloodshot eyes fixed on me.

He tottered forward, apparently gaining strength, then when barely five yards away, suddenly stumbled, losing his balance, and down he crashed, never to rise again. Most fortunately for me, my last spear was a fatal one for pig, right through the loin.

I still lay there, unable to move, but after some minutes the *shikaries* came up and pulled me out with many congratulations on my escape. But why Strawberry was so badly stunned remained a mystery. We were going a great pace, and he probably hit his head on a boulder concealed in the loose sand.

Pig-sticking sounds a dangerous sport, but there are comparatively few accidents, and the serious ones that do occur, apart from horses cut by pig, are nearly all due to a dropped spear. The leaded butt of the spear being so heavy, turns the point up, and you ride on to it. I have

known of a femoral artery divided in this way, and I have known a spear to go through the side of a horse's abdomen and the saddle flap into the rider, pinning him to his saddle. Riding once behind a young officer who dropped his spear, I saw the point come up through his calf and into his thigh pinning calf and thigh together, but such accidents are rare and quite exceptional.

So ended a wonderful day's sport, the bag five large boar. The villagers delighted at the slaughter of so many destroyers of their crops. The beaters lined up and paid. Fortunately there were no serious casualties among them and they dispersed to their homes well pleased with the day's fun.

The horses, after being rubbed down and watered, were left in the shade of a mango grove to be quietly led home by their syces in the cool of the evening.

We started to trudge back across the hot bed of the Ganges, and finally reached our bamboo dogcarts on the far side and drove home to our bungalows. After a hot bath we drink our tea under the punkah with that feeling of well-being coursing through our veins which only a day in the sun and good sport can produce.

Thus fortified, we felt ready on the morrow to face the many intricate problems that fall to the lot of six Britishers entrusted with the welfare of a million and a quarter people, spread over an area of 5000 square miles.

A few days later I found myself back again one morning in the same division of the district, but this time for work, not pleasure.

In a small branch hospital, which I had recently

established, thirty-two cataract operations were performed before lunch, and I returned home, with a feeling of satisfaction at being enabled to restore their sight to these unfortunate people, who would otherwise have been unable to earn a livelihood sufficient to keep body and soul together.

CHAPTER XIII

A POLO MATCH

THE scene is that fine polo ground in front of the Club at Agra. It is a pleasant afternoon in the middle of the cold weather, there is a large crowd of onlookers, the match is of unusual interest as our opponents are a team of four ruling Princes — Maharajas.

On the west side of the ground is the fashionable crowd in and around the Grand Stand, with the band of the British regiment. How I loathe a band when playing polo! — it appears to go to the ponies' heads and make them jumpy and even hysterical.

The ponies are lined up on the west side, our opponents to the south of the Pavilion and the home team to the north. The syces (grooms) are making a final adjustment of girths and bridles under the eye of the orderlies; each pony has his bridle and bit laid out on his blanket beside him with a goodly array of polo sticks.

Look! What an interest the ponies are already taking! Ward of our side is having some practice knocking the ball up and down the ground, click! click! as the head of the stick comes down on the ball.

See how all the ponies' heads are up, nostrils expanding, ears pricked, while their eyes are watching the white ball up and down the ground.

My ponies are: Nina, a clever, dark, bay country-bred

that would teach any man the game, fast and handy, turns like a top, but she is not as young as she was and unfortunately not so sound — she might go lame in a hard chukker.

Nero, a large black country-bred, an excellent pony that will ride off the heaviest opponent, but with a will of his own.

Zara and Rufus are walers, the former rather on the small side but very fast and handy, with good mouth and must be ridden for the critical chukker. Rufus is definitely on the slow side, and will be kept in reserve.

Six minutes to go! I walk over to the senior Maharaja with the umpire; we toss, I win and we elect to defend the south goal. Our team are No. 1. Lyle, No. 2. Ward, No. 3. Atkins, No. 4. O'M.

Now we are lining up facing the umpire who is ready to throw in the ball. Beyond him there is a sea of sunshades, dresses of every shade and colour and the flashing of those infernal band instruments.

Suddenly both lines bear down on the umpire — the white ball comes bounding in between us and the game has begun.

Steady, Nero! You are much too old a player to lose your head. This isn't a circus. Stop your bounding.

Click! Well played, Ward! He has the ball and is away. Lyle has cleared and is riding hard to his opposite No. 4. Now he is level with him, leaning well over, his knee in behind his opponent's, his pony pushing like a Trojan. This gives Ward a clean run — Atkins is backing up.

Crash! Bad luck! Ward has had his stick hooked, and

the opposite No. 2 has hit a hard clean shot past me. I must turn like a flash and gallop back to take a back-hander.

Nero, gallop like hell! That No. 2 is coming down on us like an express — here he is right on top of us, click! Well done, Nero, just in time. Back goes the ball.

Ride, Lyle! Curse you! leave the ball, and ride your Back!

Click! click! click! up and down the ground spins the ball. Now we are riding off, now turning, now hitting. What a pace! Can we keep it up? . . . Whistle. End of first chukker — six minutes! It only seems a few seconds ago we began.

Well done, Nero! You played like a book in spite of that smack on your off fore.

Now Nina, my dear, you are for the second chukker. For heaven's sake, don't go lame. Rufus is much too slow for this fast game and we should be left standing.

Line up. Whistle. Again the ball is in. The other side have it this time. Get it, Ward! and stop that No. 2, he is a dangerous man and you must watch him.

Click! The ball passes me, I gallop back. Too late, their No. 1 has ridden me off, and No. 2 is hard on the ball. He'll never do it at that pace . . . Yes! . . . No! . . . Heavens! He has! Up goes the flag behind our posts.

Whistle. Cheers. Score, One — Love. Back to the centre of the ground. Click! click! The ball has gone out of play. Throw in. Where's the ball? 'Under your pony's feet, Ward! Get off it!' . . . Now it's come out to me. I start to dribble. Now, Nina, we are in for a run.

Whistle. Bad luck! The first chance we had of getting away.

Well played, Nina, you did your best but you are getting old, and those other ponies are heavier and have the legs of us!

Never mind, we are holding them, and it is anybody's game as yet.

Chukker No. 3. Now, Zara, this is your chance, but our opposite No. 1 on that very handy grey Arab is going to give us little peace — he will be hugging us all the time.

Up and down we ride, bumping, swaying, galloping all the time. Whistle. A short chukker — but by Jove, what a pace!

Half-time. Head in a bucket and a mouthful of soda-water to wash down the dust.

Chukker No. 4. From the start Lyle dribbles away. Now he cleverly hits a back-hander to Ward, who takes a fine drive down the ground but is ridden off by his opponent. Atkins is backing up well and hits a clean shot through the centre of the goal. Yells! Much waving of sunshades. Score, One — All.

But our triumph is short-lived from the re-start. The Maharajas get away and their No. 2 drives towards our goal, and as Atkins is galloping back to support me, I gallop to meet the ball. Their No. 2 and I meet on the ball. Crash! Damn it, my stick has smashed. I gallop back for another but Atkins is overwhelmed meantime by their Nos. 1 and 2, who dribble through the posts. Whistle. Score 2 — 1 against us.

Chukker No. 5. This is a hard-fought game, but towards the end, when I am ringed in with three oppon-

ents, by a lucky stroke I manage to loft the ball which soars over their heads. Atkins rides on to it and taps it up to Ward, who gallops hard and hits a fine goal.

Great yelling from the crowd and much waving of arms and handkerchiefs. The tension is terrific. Time! Score Two — All.

The last chukker. Only three and a half minutes of time remain. Can we do it, Zara? Much may depend on your turn of speed, so brace yourself for the final effort.

Line up, in comes the ball. Click!

Our opponents have it, and are away.

Thud, thud, of galloping hoofs.

'Well played, Ward!' An excellent back-hander.

It is met, however, by their No. 4, and goes shooting back towards our goal, but Atkins has it this time, and has hit a back-hander, Ward gets on to the ball, I shout, he sees the opening and hits it diagonally across to me.

Now, Zara, this is our chance!

Yes, our one and only chance to win.

Click! That is a straight shot up the field.

Gallop, gallop, like the wind — they are catching us up!

Click! Damn it, that is not too good, the ball has gone off too much to the right.

Steady! Steady, old lady! It will be a difficult shot under your neck, but. . . .

Now, now! Click! Yes, the ball is travelling in the right direction, but to see it is impossible, the dust is so thick.

What is that fluttering? The goalpost or the flag? Which? Yes, the flag!

The bugle sounds. We have won just on time. Score, 3 — 2. Hurrah! Hurrah!

Frantic cheering from the crowd. The band starts up, orderlies and syces are beaming. The ponies prancing round in anticipation of a mouthful of lucerne.

Three cheers for the Maharajas! A great game!

Head in a bucket — and a long drink of soda-water.

Now round the ponies, to pat my thanks on their soft twitching muzzles, and to see that they are being well rubbed down and their putties put on.

Poor old Rufus! You look rather dejected, but you shall have your chance next Polo day when the pace is not so killing.

CHAPTER XIV

THROUGH KASHMERE TO LADAK OR LESSER TIBET

ONE morning in the spring of 1918, on going into one of the operating theatres at Agra, where one of my assistants was preparing to open a man's windpipe, I realized that a moment's delay would prove fatal and seizing a scalpel I did the operation without putting on the special mask which protects the surgeon in these operations. I was, of course, bespattered with the highly infectious discharge, but directly the man's life was not in immediate danger, I rushed away, washed my face with disinfectants, and gargled, and thought myself safe. But a few days later when away inspecting I was suddenly seized with severe pain in the throat and had to go into hospital. After three weeks my condition had improved and while I was not really fit for work, it was essential for me to return to duty, as in those strenuous times there were so few surgeons to deal with such a mass of work. I struggled on for a time, but my Inspector-General then realized that leave was essential and sent me away for three months. The effects of this infection have remained to this day, and even now, sixteen years after, it is necessary to have a fortnightly injection of vaccine.

My three months' leave was at least a delightful experience. I shall proceed to tell how I spent it.

Starting from Agra a day and a night's railway journey

brought me to Rawalpindi; it had been my first station in India, and I had not seen it for just on twenty years. From Pindi I went on by tonga to Murree, 7600 feet above sea-level.

The journey was full of charm and interest. Pleasant little bungalows are dotted in and out on the well-wooded hillsides, commanding magnificent views of the mighty Himalayas, extending range after range far away to the north; while to the south one looks down on the vast plains, reaching out as far as the eye can see, like a blue-grey ocean, broken by ribbons of silver — the five great rivers of the Punjab; and if there are clouds about, one is so far above them that they give the effect of white-tipped waves.

After driving downhill from Murree to the north, we came to the Jhelum, one of the five rivers. The Jhelum is the classical Hydaspes and marked the eastern limit of the victorious march of Alexander the Great. The river at this point forms the frontier between British India and the native State of Kashmere.

The wonderful mountain road winding up the left bank of the Jhelum is carried now by a bridge over a deep ravine, now continues as a precarious shelf on the perpendicular side of the cliff, now it tunnels through great masses of rock. Now it rounds a sharp corner with perhaps a low parapet, or, still more likely, nothing between you and the yawning abyss to the torrent hundreds of feet below.

The scenery is magnificent, the eye glances down from the great snow-covered peaks to pine forests and green grazing grounds dotted with goats and sheep, still farther



MASS PRODUCTION OF DOCTORS FOR THE INDIAN ARMY

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down to well-cultivated terraces, and groves of walnut, peach and almond trees. Farther along, forests of chestnuts lead down to orchards of apples, pears and cherries, with here and there mulberries, so beloved by the black bears, while vines are trained to the poplars or hang like garlands from the branches.

Intermingling with the whole are waterfalls, ranging from a tiny rivulet to a surging cascade, all sparkling in the sunlight and leaping down to the roaring torrent in the valley far below.

While Italy is a country of running water, flowers and fruit, Kashmere has the added charm of bird-life, and of fragrant odours. Indeed it enjoys an even greater variety even of flowers and fruit, and, above all, grass — beautiful springy turf.

And so we travelled to the point where the Woolar Lake, some ten miles by four, flows out into the Jhelum. At this point the whole valley of Kashmere opens out as a vast vista of green pastures interspersed with broad lakes and meandering streams winding across the plains. The whole enclosed by a great but distant wall of mountains rising peak upon peak to immense heights, covered with a mantle of eternal snow, gleaming and sparkling with an indescribable play of colour.

This beautiful and fertile vale, over 5000 feet above sea-level, was formerly a great lake a hundred miles long and twenty miles broad, until at some remote period it burst through the natural dam at Baramoula to pour itself into the only outlet, the bed of the Jhelum.

One naturally looks through rosy spectacles when one has escaped from the parched brown plains of India with

their furnace-like heat. But the beauties of this far-famed valley have not been exaggerated by the many writers and poets of all ages.

Suddenly, ahead, one sees the two prominent landmarks of the capital — Srinagar, the City of the Sun — sometimes called the Venice of Asia: namely Takht-i-Sulieman, a precipitous peak rising to an altitude of 1000 feet above the plain and crowned with an ancient Hindu temple built nigh on 2000 years ago; and a lower hill, which carries on its summit the fortress prison of Hari Parbat.

At last our eastern gondolas — *shikarahs* — carry us up the Jhelum, past the ghauts with their crowds of Hindu worshippers, past a quaint medley of craft of all descriptions, under innumerable bridges cantilever in principle, but built of piles of great logs, each row projecting farther and farther towards the centre than the row below; now on past a *bagh* or garden of grassy lawns spreading down to the water's edge and shaded by groups of fine chenar trees.

But Srinagar is not the magnificent city it was in the days before the Mohammedan invaders destroyed its ancient palaces and temples, and laid waste everything pertaining to their idolatrous enemy, the Hindus.

After a few days' rest and an official call at the palace of His Highness the Maharaja, and the British Resident, Colonel Bannerman, an old friend of mine, we proceed on our journey. Early one morning we started through delightful channels in the Dal Lake and wound our way along a canal through the outskirts of the city. The water is filthy and assaulted our olfactory senses almost beyond

endurance, but the Kashmeries bathe in it and carry it up to their houses in great pots for drinking. As may be well imagined, when cholera visits this picturesque city it exacts a terrible toll.

On we skimmed past ghaut after ghaut, under stone bridges built from carved stonework of the desecrated Hindu temples, past endless remains of idols and deities all defaced by the fanatical and avenging Mohammedan conquerors.

Away from the city our boatman paddled us across the Anchar Lake to enter a kind of delta of the Sind river; this torrent, released from its rocky gorge, opens out into many channels and spreads onwards to the Woolar Lake. These streams intersect a delightful sward of grassy banks and shady trees, but the water is a brownish grey, evidently coming down from the glaciers and melting snow, and is icy cold.

Our boatmen then discarded their paddles, and towed us up slowly, but surely, into the low hill country, and just after midday we reached the village of Guanderbal, at the entrance to the beautiful Sind valley, and found our camp pitched by our *shikaries* and servants who had gone on the night before.

The first halt out from civilization on an expedition of this kind should be given up to proportioning loads, checking stores, examining ammunition, and looking over the baggage animals and camp kit, in order to be able to retrieve something that is sure to have been forgotten, no matter how careful a *bandobast* (organization) you have made. The country we were approaching was destitute of provision stores and food of all kinds, even for our Indian

servants, and the only supplies we were likely to get would be an occasional sheep or fowl. No flour, potatoes, vegetables, butter, milk, etc., are obtainable. The halt also gives the servants time to settle down into camp life after the many attractions of the bazaar. Indian servants are the best in the world, especially in camp. Your *khansamah* (cook) on the march in India plods along in the rear of the column, disappearing now and again into a bazaar to emerge with a fowl under his arm, or a bundle of vegetables or fruit. Arrived in camp he collects a few stones to form a fireplace, and twenty minutes later, from the few saucepans he has carried on his back, he produces a four-course breakfast, such as porridge, eggs, grilled chicken and fruit.

From Gunderbal to the Zoji La Pass the gateway into Ladak, is five marches up the Sind valley, noted for the most beautiful scenery in Kashmere. Half-way up this valley we halted for a few days and endeavoured to shoot some black bear. The weather was perfect but, though cold at night, we did not pitch our tents. We merely put up our camp beds in a walnut grove looking down directly into the valley some seven hundred feet below. About half a mile from our camp down the hill was a grove of mulberry trees, and after dinner, taking our rifles, we walked down and took up a position commanding these trees, hoping that a bear or two might turn up; as nothing had put in an appearance by midnight, our *shikaries* made torches and lit us back to camp, the glow of the torches throwing the rocks and jungle into fantastic and weird forms and in imagination we had seen several bears before reaching our beds.

The feeling of exhilaration on waking up next morning after a night's sleep in such air is wonderful and, while you stretch, looking first up at the snowy peaks above, then down through the trees to the beauty of the valley and river below, is a sensation that, once experienced, can never be forgotten.

One morning I saw on a footpath below our camp, the largest pad marks of a bear that I had ever seen, but all our endeavours to effect a meeting were doomed to failure.

At the end of the fifth march we reached Baltal and spent the night in the dak bungalow, or rest house, at the foot of the pass. Camping in the open in this bitter cold, with six or seven followers, was a fine old merchant from Turkestan. He had been four months marching down from Central Asia to India with bales of carpets and rugs, and was now returning with loads of metal utensils and cotton goods. The encampment was formed by a ring of bales, inside which the party sat smoking their hookahs and making tea with a samovar. At night, they rolled themselves in thick sheep-skin coats and slept between bales. We marched together along the same stages for many days.

We were now faced with a huge deep ravine entirely filled with an enormous mass of snow; from under this, a raging torrent dashes down to form the source of the Sind river.

This mass of snow rises almost precipitously for 2000 feet and up this steep face lies the way to the summit. The climb, as long as the snow remains firm, is not dangerous, but later in the season the snow roof over the great caves and tunnels worn by the torrent beneath becomes

thin and treacherous, and an inexperienced traveller runs the risk of falling through to certain death.

We spent the evening reconnoitring the approach to this rampart and making arrangements for a start at 3 a.m., which according to our *shikaries* was necessary; the snow at that early hour being frozen hard made easy walking, while later in the day the sun thaws the surface adding greatly to the difficulties of the climb.

Called shortly before 3 a.m., we made a hasty breakfast. The cold was intense, an icy wind blowing down from the summit of the pass. But as we scaled the great barrier, the blue frosty haze began to lift, and although the sun was hot before we reached the top it had not sufficient strength to thaw the frozen snow.

On our return two months later the pass was unrecognizable, the enormous mass of snow had almost entirely disappeared, revealing a long zig-zagging road which extended up the left side of the ravine to the ridge at the top.

The Zoji La is 11,600 feet above sea-level, and one passes at once from the amazingly beautiful forests and pastures of the Sind valley, with its pinnacled ranges of mountains, to the arid barrenness of Tibet with its absence of trees and grass, and its high desert plateaux covered with masses of rock sloping down to beds of loose gravel — in other words, to the great bleak wastes of Central Asia with little or no rainfall, as the monsoon clouds are cut off from further penetration north by this range of mountains.

Ladak, Lesser Tibet, or Western Tibet, as it has been variously called, is not separated from Chinese Tibet by



A TWIG BRIDGE IN KASHMERE

any natural barriers; the same mighty rivers flow through both countries and the high desert plateaux extend from one to the other without a break.

Both countries are inhabited by the same Mongolian pig-tailed people, Buddhists by religion, who look upon the Grand Lama at Lhasa as their supreme ruler; the same language is spoken and the people observe the same customs and habits. The characteristic dress is the same. I shall describe it later in detail.

The scenery under a clear blue sky is grand but dreary. The vast rugged mountains, broken up by dark nullahs and ravines, extends down to rocky, trackless, grassless plains, except where here and there a welcome green oasis bursts into view, the result of a diversion of one of the many mountain torrents fed by the eternal snow.

The climate varies from the most burning heat to intense cold, the variation between limits having the extreme range of 110 degrees; the annual rainfall is small, being only 2·7 inches.

The earliest mention of Ladak is by the Chinese pilgrim Fakien A.D. 400, who, travelling in search of a purer faith, found Buddhism flourishing there, but the only novelty to him was the prayer cylinder, the efficiency of which he declared to be incredible.

The country was conquered and annexed in 1834-1841 by Gulab Singh of Jammu, the unwarlike timid Ladakies being no match for the Dogras who are one of the finest fighting races in India. The widespread prestige of China is illustrated by the fact that tribute for Ladak, though disguised as a present, is paid to China annually by the Maharaja of Kashmere.

The mountain range of the Western Himalayas contains many mighty peaks, varying in height from an average of 18,000 feet to the 26,620 feet of the great Nanga Parbat.

This natural barrier cuts across Kashmere territory from the Indus valley on the north-west to the Chinese frontier on the south-east, separating the land of the Aryans to the south from that of the Mongolians to the north, and the lowest point in the range is the Zoji La Pass. La is the Tibetan for pass.

These Himalayan passes are terrible death-traps during spring and autumn to caravans which try to cross too early or too late in the year, and also to the post-runners, who endeavour to get over during the winter months. Sudden icy gales spring up without warning if the weather has not been studied before making the attempt, and travellers caught on these exposed snow-covered slopes will be rapidly frozen to death. The passes are strewn with the bleached bones of baggage animals, and on one occasion a caravan of over 400 animals was frozen to death with their drivers. A *shikari* of mine on another occasion lost his life in this way; when found, he was frozen absolutely rigid with his rifle tucked under his arm, to protect the breech in his armpit. I concluded he had become sleepy from the intense cold and, sitting down for a minute, was frozen to death before he could recover himself.

From the top of the pass down to Matayun, our next halt, is a gentle fall of only 600 feet from the summit. Once over the pass the road presents little difficulty, except for the unfortunate baggage animals, who sink and flounder in the soft snows of the drifts.

On arrival at the rest house we found a dead horse lying across the door; it had apparently been there during the winter and was not offensive, being frozen as stiff as a stone statue. We got in about 1 p.m., having taken ten hours to do the sixteen miles, but the baggage animals did not arrive until several hours later.

Imagine life in this village during the long winter, the inhabitants snowed up for eight months, swept with icy blizzards, with little fuel, and that mostly dung cakes. The only light an oil wick, and no possibility whatever of replenishing their food supplies should these run short. There was one educated Kashmeri, a telegraphist, who had the difficult task of trying to keep up telegraphic communication between Srinagar and Leh.

The next day a march of about fourteen miles through snow and broken rocks brought us to the town of Dras, where we pitched our tent and camped on the banks of the Dras river, a tributary of the mighty Indus.

These people were Mohammedans, but there was abundant evidence in the idols of carved stone that Buddhism had at one time been the religion of the district.

Here we were met some distance outside the little town by the *thanadar* or police officer, and the *tehsildar*, an officer of the state with magisterial powers. We were travelling with a *parwana*; this is an official document given to certain travellers by the Kashmere Durbar (Government). A glance at the envelope immediately procures assistance from officials of all grades; coolies, and baggage animals of every kind, riding ponies, and supplies are at once forthcoming, whereas without it many difficulties

would be sure to arise. The Durbar also notifies the officials along your route, so that transport can be arranged in advance and troublesome delays avoided.

At Dras there was no longer heavy snow in the road and we were therefore able to dispense with baggage coolies, the loads being taken by either ponies, mules or yaks. Our clothes were carried in yakdans, those light wooden trunks, covered with leather to make them weather-proof and rendered very strong by being capped at the corners, and bound with galvanized iron sheet. One is a coolie load, but two connected by rope through the rings in the back are slung on each side of a baggage animal. Your bedding is carried in a stout waterproof canvas valise. A fold-up camp bed, a table, a chair, and a canvas bath complete your camp equipment, but rifles, a gun, field glasses, two, or better, three pairs, for the *shikaries* and yourself, camera and ammunition have also to be provided and to be well protected against all the violent knocking about that is unavoidable in this kind of transport.

The cook's *dechies*, or pots and pans, and his stores are carried in *kiltas*, jar-shaped wicker baskets covered with hide.

The pleasures of an expedition of this kind depend largely on whether a good *bandobast* has been made. This is a most useful Indian word, covering every kind of arrangement and organization. When everything has to be carried, including food for the servants, one naturally requires a good deal of transport, and one has to work out the necessary quantities of supplies and to pack them in the right weight of load for coolie or baggage animal; you

record exactly what you have in each box or yakdan on a list inside the lid, and you number every package.

Packing in units is an excellent plan, one unit consisting of all the stores and food for three or four days. This has two great advantages, first enabling you to discard boxes and cases, and so reduce baggage animals as time goes on, without mixing up the remainder of your stores, and, secondly, you avoid the considerable risk of losing one particular item of supply by the transport animal going over a precipice.

I remember once, when with a small column on a march of several hundred miles into the wilds, we had an accident of this sort. The supply of whisky calculated to last two months was carried in a small barrel on a mule.

Two days out the poor brute took a false step and went over a precipice, being killed on the rocks many hundreds of feet below. Had our whisky been divided up into two or three kegs in different loads, we should not have had to go without this precious liquid during a most arduous and trying time.

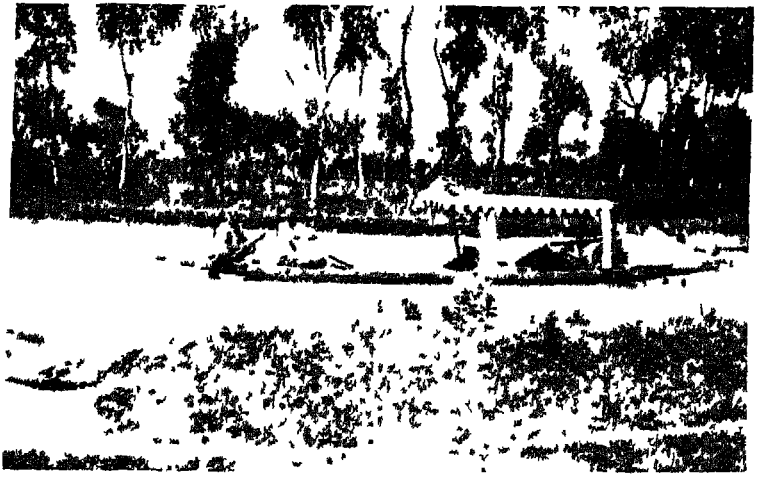
We completed three stages from Dras to Kargil in two marches. During those two days we saw a little more animal and bird life, larks and snow pigeons and that queer little animal, the marmot. He is a stout-bodied rather short-legged rodent, with long, slightly coarse, yellow and black fur, and bushy tail, living in burrows between rocks and hibernating in the winter. Marching along they are frequently to be seen standing up on a prominent rock, uttering a sharp, whistling cry; and they drive dogs nearly frantic, luring them on with their

whistling, allowing a near approach, then suddenly dropping directly into their holes, to as suddenly reappear and continue their taunts directly the unfortunate dog has retired a short distance. I shot a number and made a large and excellent motor-rug with their skins. Woe betide anyone who approaches a wounded marmot or attempts to pick one up that is not dead, they are such ferocious little creatures. A Buddhist would not kill one on any account, believing it to be the reincarnation of an evil person's soul.

From Srinagar to Leh is 260 miles and after passing the Zoji La, more than half the road winds up and down deep and often narrow gorges, and while the scenery is frequently extremely grand and bold, the general aspect is depressing owing to the absence of vegetation; relief from this is experienced at Kargil as the valley suddenly opens out into a broad and green oasis, regarded by Ladakies as a paradise. It is the most fertile district in Tibet, with its waving fields of corn and sunlit groves of fruit trees.

We met few travellers on the road; only two Britishers, one, an assistant commissioner, Captain Finch, from the Residency in Srinagar, going up to Leh as Resident for the summer months, and the other that intrepid explorer Lady Hailey. Only twelve permits are given annually to British officers or others who wish to travel in Ladak, and no British official is under any circumstances allowed to enter Chinese Tibet.

It was too early in the year to meet the caravans bringing down bales of carpets and rugs from Central Asia, or to meet the thousands of baggage ponies stumbling over this rocky road, often for as long a march as four months,





Above PADDLING UP THE SIND RIVER, KASHMERE
Below CAMP IN A KASHMERE GROVE

carrying Manchester piece goods to Yarkund, Kashgar and far off Turkestan.

The only people we met were occasional lamas, in their dirty red robes. Red lamas are found only in Ladak, while yellow lamas, a more strict sect, are the prevailing monks in Chinese Tibet.

From Kargil onwards everything becomes more typical of Tibet. Vast stony tablelands, intersected by the winding sources of many rivers, flowing out at the bottom of deep and precipitous ravines. The piled-up, flat-top mountains, covered here and there with snow but devoid of trees or vegetation. The whole, under a cloudless sky of transparent pale blue. The humidity of the air is at a minimum, which gives a feeling of exhilaration and well-being.

But this was a long and trying march, as the road kept on zigzagging high up the sides of steep hills, to descend almost immediately at the same steep gradient, then up long stretches of dark narrow ravines with their overwhelming sense of imprisonment. After twenty-three miles of this road, we found ourselves and our servants almost played out, and we resorted to that invaluable restorative, a little whisky in very hot tea.

We were now in Shergol, the first entirely Buddhist village on the road; the houses, compared with those of the villages in Kashmere, are well built, of mud with flat roofs, packed close together with narrow lanes between.

The approach to each of these Buddhist villages is down an avenue of *chortens*; these are large structures of dry mud, with a square base supporting four tiers of circular steps, on which rests the flat circular top. These three

component parts are equal in height, and are often painted with the brightest of colours. Buddhists are cremated in a kind of oven by the lamas and some of the ashes mixed with clay are formed into an idol; if the departed was a lama or a man of means the idol is placed in the centre of a *chorten*, but if a poor person, the idol is deposited, with a large number of others, in the same *chorten*.

On the eastern side of Shergol is the first *Mani*, or wall of praying stones. *Manis* are found everywhere in Ladak but they usually form the approach to a village. These walls are often as much as a mile in length, usually with a *chorten* at each end. They are immense walls of flat stones, from 3 to 6 feet high and about 8 feet in width, the top sloping from the centre on either side, each stone varying in size from a few inches to about 5 feet in diameter. Every one of the stones forming the roof is elaborately and often beautifully carved with figures of Buddha, mystic characters of Tibet, and prayers. The universal prayer of the country is '*Om mani patmi Om*' ('O Thou jewel in the Lotus, O'). The carvings are done by itinerant lamas, who generally start from Lhasa travelling about Buddhist countries. The inhabitants regard this as the holiest occupation to which a saintly lama can devote his life. As the road approaches a *mani*, it divides to the right and left of the wall, it being essential that the faithful pass along the *mani* on his right-hand side. If a Buddhist observes this, all the thousands and thousands of stones will pray for him, bringing him nearer Nirvana.

Three miles from Shergol is the village of Mulbek. The road leads through a small irrigated patch and

orchard, and, on turning the corner, one is suddenly confronted by a mass of rock on the face of which is carved an idol about 15 feet high, representing the god Chamba.

We then entered the region of praying wheels, propelled by hand or water, sacred flags, altars of stone on which are placed horns of animals and other offerings to the gods, with magic signs and sacred writings on the rocks and cliffs.

In many of the defiles are quaint buildings carved out of the rock high above the road, and decorated with bright paint; these are sacred, and were at one time the dwellings of departed lamas, but are now uninhabited.

Almost everyone carries a praying-wheel which they constantly revolve. The wheel consists of a handle about five inches in length, from the upper end of which a spindle passes through a cylinder about two and a half inches in length and the same in diameter. The inside of this is packed with rolls of prayers, and made to revolve by a twist of the wrist, aided by a short chain with a weight at the end attached to the outside of the cylinder.

In the monasteries are larger praying-wheels about two feet in diameter; these project on a spindle from the walls, and each monk as he passes gives them a whirl. There are also praying-wheels driven by water power. The large drum, packed with prayers, is fixed across a stream and revolved day and night by the rushing water.

When the day comes for the utilization of the wasted water power of this country, a few electrically propelled praying-wheels should rapidly obtain Nirvana for the whole population of Ladak, doing more praying in a day

than the hand praying-wheels and sacred flags would do in a lifetime!

The endless praying flags are painted with sacred signs, and, fluttering in the breeze, accomplish the same end as the *manis* and praying-wheels.

During this march we crossed the Namika La Pass; this is 13,000 feet above sea-level or 1500 feet more than the Zoji La, the road was excellent and there was no snow. The end of this march brought us to Kharbu, and we received the first mail since leaving Dras.

We found the male inhabitants squatting in silent motionless groups on the flat house-tops, apparently lost in prayer and meditation. As we passed, they rose, bowed, and, in chorus, muttered the word *jooly*, which is the Tibetan equivalent for the Hindustani *salaam*, and at once returned to their reflections.

At Kharbu was stationed an official of the Kashmere Government, who was related to one of my staff at Agra. The news of our coming had spread far and wide, and several notable men of the town and neighbourhood had brought in offerings or *dalis*. The *dali* is the visiting card of the East, and it would be an insult not to accept it, but the government regulations on this matter are very strict, officials only being allowed to accept presents consisting of fruit, flowers and vegetables. This is a necessary ruling as otherwise all kinds of valuable articles would be presented, with the object of currying favour for the donor; and one's servants have to be instructed, in going over each *dali*, to detect illicit articles before it is allowed into your presence for acceptance.

On high days and festivals the amount of raisins, nuts

of all kinds, and oranges that one receives is enormous, and an embarrassment to dispose of, in spite of the alacrity with which servants help in the matter.

From a person of importance, such as a raja, a large bowl of rupees is offered but not meant for acceptance; the right procedure is to touch and return it with thanks and appreciation of the courtesy.

Two Dogra officers of the Maharaja's Imperial Service troops also came forward to pay their respects, presenting the hilts of their swords, which were duly touched and handed back.

After a day's halt in the Kharbu valley, 12,000 feet, we passed in one march to the next camp, over the Fotu La, the highest pass on the Srinagar Leh road, and nearly 13,500 feet above sea-level.

The view from the top of this pass was wild and weird to a degree. Through a break in the towering rocky peaks wrapt in cloud, one looked down on a vast waste of great tablelands, divided up by deep ravines and flanked by snow-covered ranges; no sign of life, not a tree, not a blade of grass — just an immense wilderness of plateaux, mountains and snow. The boundless solitude and utter silence were indeed awe inspiring.

From this pass we zigzagged down to a narrow dark gorge, with vertical sides, moulded in the usual fantastic forms of towers and pinnacles. Then suddenly the defile opens out into a broad desert valley strewn with boulders and stretches of pebbles. At the far end of the valley, as it narrows again into a defile, stands the village of Lamayuru, surmounted by its gompa or monastery on a high crag. The lamas of Tibet either build their monasteries

on the summit of some almost inaccessible peak, or tunnel into the face of a perpendicular cliff. I repeatedly inquired the reason, and was usually told that the idea was to get their dwelling as near Heaven as possible. Also, that while a Buddhist despises all that is beautiful in nature, he has a love for seclusion and desolation. Judging from the numerous gompas I saw in Ladak, success has been achieved on both objectives, as, while many were perched at great elevations above the homes of their followers, in almost every case the monastery was in the most bleak and desolate spot imaginable.

When built on a crag, it is an extensive building of baked mud and wood, of similar construction to the Ladak house, but if honeycombed out of a cliff, a projecting wooden gallery is built out from the face of the rock and painted with broad bands of bright colour, in contrast to the white of the rest of the building.

The gompas appear to be well organized; there are two orders of monks, the secular and spiritual. The former carry out all the temporal work, and as the monasteries are well endowed with extensive lands, this entails the cultivation of the ground, collection of rents and alms from distant villages, and they also act as the bania of India, advancing seed grain, and money at high rates of interest.

The spiritual monks spend their time in contemplation, muttering prayers, and in learning religious exercises and dances, but at the same time appear to be ignorant of the canons of their religion, and have long since forgotten the meaning of their intricate symbols and ceremonies, degenerating into a meaningless superstition.

The universal prayer, 'O! thou jewel in the Lotus, O!' is repeated dozens of times a day by all true Buddhists, but if a lama is asked what these words actually mean, he admits ignorance, adding that they are very holy, and therefore it is his sacred duty to keep on repeating them.

Every Buddhist believes that the only way of obtaining Nirvana is by closing the gates guarded by six sphinx gods, and the only means of closing these portals is by endless repetition of prayers either by the turning of hand or water wheels, the fluttering of flags, or constant mumbling.

The people openly admit that they know nothing about their religion. That is not their concern, they pay the lamas to look after their souls.

The head of the gompa is an abbot chosen from among the spiritual monks, but in a small number of monasteries, the spiritual head is a *shooshok* or reincarnation, i.e. a saint so holy that at death he refused Nirvana and returned to earth to benefit humanity by living again.

When one of these holy men is on the point of death, he summons his lamas and tells them where he will be reborn. Immediately after his death the lamas journey to the place named and look for a new-born babe, which, according, to their belief bears the sacred signs. Having decided on an infant, they leave him with his mother for four years, when they return with such priestly articles as praying wheels, rosaries and holy books, among which are the belongings of the late incarnation.

The child is then supposed to prove that he is the new incarnation by recognizing his property, which according to the belief of the lamas he invariably does.

The child is then taken from his home and educated in the sacred rites, first in the gompa of which he is eventually to be head, then for a number of years in Lhasa. Finally, he returns to his own monastery and lives apart from the other lamas in a separate house, meditating away the years, until the time comes for him to die, when the same procedure is repeated. Both the lamas and people have apparently absolute belief in this reincarnation which is known to have taken place as many as eighteen times. The *shooshoks*, abbots, and lamas recognize as their supreme head the Dalai Lama of Lhasa; these lamas are constantly intriguing and trying to stir up trouble in Ladak, and to such an extent is this carried on that the Kashmere Government has forbidden communication on temporal questions between the lamas of the two countries. Unless a constant watch were kept it would become a serious source of trouble, as almost every family in Ladak, rich or poor, gives one or more members of the family to the church, which is consequently in a very strong position. It is also well endowed with some of the best agricultural land in the country, paying only a fraction of the land revenue levied on that of the people.

After passing the praying-wheels at the gates of a gompa one usually enters a large dimly-lit hall, the walls of which are hung with Chinese tapestry, silks embroidered with dragons, terrible-looking fiends, and images of Buddha. Arranged round the walls are large copper ewers or glass bowls of holy water. In this hall the lamasery band plays barbaric but impressive music, alternating with a dirge-like chanting by the lamas. Opening from the hall is the idol room containing a large image of

Buddha, and brightly coloured idols, monsters and demons, the work of some travelling lama from Lhasa.

The lama's dress is always dirty in the extreme, consisting of a coarse petticoat that was once red, and a large shawl of the same colour and material thrown over the shoulders, leaving both arms bare. The head is close shaven and covered by a cap with large flaps, similar to those worn by the people but of the same colour as the petticoat and shawl. The feet are protected from frost bite by large mocassins of sheepskin. I should very much doubt the fact that a lama has ever been known to wash.

They all carry a rosary, praying-wheel, and phial of holy water.

Ladak is a pleasant country to travel in because of the people, who are truthful, honest, simple and very hospitable, with no religious bigotry or caste prejudices like those of the Hindus, which raise such impassable barriers between Europeans and Indians.

There is no purdah and the women walk about openly and unveiled, and are quite prepared to converse.

A Ladakhi will eat with a Christian and drink from a cup used by him, he welcomes you into his home, into the monasteries and other sacred buildings, to his religious plays and ceremonies, hiding nothing and always open and ready to explain to the best of his ability an obscure point.

A Buddhist looks on a Christian as past all hope, and doomed to be reborn in some lower form, or hunted through space by fiends and demons, but he treats him with good-natured tolerance and pity, never alluding to the hereafter or seeking to persecute one of a different faith.

Both men and women are warmly clad, even in summer, the women's long frocks reaching almost to the ground, with heavy sheepskin cloaks and large fur-lined boots. The most distinctive feature of their dress is the *peyrak*, an ornament peculiar to the women of Tibet. It is made of leather and covered with flat turquoises. Starting from the forehead, it follows the curves of the head and back of the neck, to half-way down the back, and is about 2 feet 3 inches in length, varying in width from the narrow part at the forehead to 6 or 7 inches on the back of the neck.

The turquoises are of inferior quality, greenish in tint and imported from Lhasa; however, all the personal property of the wearer is invested in these turquoises, which may be worth from £20 to £30.

It gives one the impression of being an uncomfortable article of dress, and the arrangement of their coarse black hair in great masses on each cheek, their small Tartar eyes and flattish nose produce an effect far from attractive.

The men wear a pigtail, often so long as to trail on the ground behind them, a cap with large ear flaps and a long robe or petticoat reaching almost to the ground.

All the people in Ladak appear to be fairly prosperous and better off than their Mohammedan neighbours the Kashmeries to the south, and the Balties to the north, who, with their two or more wives, are always on the verge of starvation. The Arian custom of polyandry practised by the Ladakhi is apparently well suited to the unfertile country and the character of the people, and appears to work well without evil results.

When the eldest son marries he takes possession of the





Above. TWO LAMAS IN LADAK
Below. A LADAKI AND TWO WOMEN

family estate, but is obliged to support the two sons next to himself in age. These two sons cannot make independent marriage, but share the wife of their eldest brother, and are minor husbands. The children of the family regard all three husbands as father.

If there are more than three sons, the others must leave the family estate and become either *magpas* (a term which I shall explain presently), lamas or coolies. This arrangement leaves the eldest son in a better position than his parents, who can only retain a small part of the family estate on which to support themselves and their unmarried daughters. The two younger brothers, although minor husbands, are often in a position little superior to that of servants, and are not responsible to the State for the land revenue.

If the elder brother dies leaving no children of this strange union, the woman can divorce herself from the two younger brothers. A thread is attached from one of her fingers to a finger of her dead husband, and on being broken she is divorced not only from him but from the other two as well.

In Ladak, unlike most Oriental countries, the woman has full legal rights; if there is no son the eldest daughter succeeds to the property, she is under no compulsion to marry an eldest son and his two brothers, but can contract another form of marriage with a younger brother of a large family, and have the gentleman all to herself. A husband of this sort is termed a *magpa*, and being the slave and property of his wife is in an unenviable position. He cannot leave her except for adultery on her part, while, on the other hand, she can turn him out of house and home

at any moment without any form of divorce or compensation, but the late Resident in Ladak, in his book on the country, says that she generally gives him a sheep or a few rupees (a rupee is 1s. 6d.).

There appear to be plenty of women about, but few children, polyandry keeping down the population.

The dog in Ladak is deposed by a fascinating little animal — a black goat, unlike the ordinary run of goats in every way. He has long black silky hair, with the brightest of red tongues, lives with the family, and unlike them, is clean, he goes with the women or men out to the fields, following them about like a dog and on the approach of a stranger will run up to the edge of his field and stand watching, greatly interested.

The goat is more often seen with the woman, as it is she who goes out to work in the fields, leaving the man at home to spin and look after the children. These goats never grow to a height greater than 18 inches.

The next march from Lamayuru was through Khalsi to Nurla, a distance of some eighteen miles.

The road for a considerable distance descends a dark and deep defile, then unexpectedly emerges and passing over a short stretch of comparative plain, we suddenly found ourselves looking down, almost vertically, into the course of that mighty river, the Indus.

The gorge is gloomy and awe-inspiring, but magnificent in the boldness of its scenery. Just think of this raging torrent, held in by immense walls of rock, hurrying, tearing and leaping down to the plains of India below. Some idea of the force pent up in this river can be imagined from the fact that the Indus at Leh, a little

higher up stream, is eleven thousand feet above sea-level.

The damming up by the vast glacial barrier is a constant source of danger to the valley of the Indus in the plains of India, especially at the Attock Bridge, the main gateway to the North-West Frontier, over which passes the strategic railway line. When this barrier bursts, an enormous lake, which may empty itself in a single day, is let loose to leap down the course of the Shyok river into the Indus near Sharda. The wave has been known to be as high as thirty-five feet, the river at Sharda rising 18 to 20 feet within half an hour. The devastating effect of this volume of water aided by a fall of several thousand feet can well be imagined.

The most disastrous flood in the history of the Indus Valley occurred in 1841, when the water, as the result of an earthquake, was dammed up for seven months. A Sikh army of 42,000 men was encamped on the eastern bank of the Indus near Attock, and when the flood water reached this point the whole army was swept away.

In 1858 and again in 1929, a terrible flood occurred, and in the former year a wave was driven up the Kabul river inundating and destroying the extensive military cantonment of Nowshera.

The new and important Lloyd Barrage at Sukhur was at one time thought to be in danger, but the flood takes over five days to reach this point and has by then lost much of its force.

In these days all possible steps are taken to give timely warning; firstly, signalling by a chain of bonfires on mountain peaks for a distance of over 170 miles; then, once the

line of telegraph is reached, the news is flashed to the governments of the three Provinces concerned and all towns and villages in the upper reaches of the Indus duly warned.

During this march to Nurla, I rode a pony which appeared to be more than usually hardy, and I gradually extracted the information from his owner, who was walking by my side, that his mount was considered the best polo pony in Nurla and that if I wished to see a game he would arrange it that evening. This was excellent news, as I was particularly anxious to see the game played in its original home of Central Asia.

In the evening we were escorted to the village, the game took place in the main street or bazaar, all the shops being closed for the time. The goal posts consisted of large pieces of rock, and a rock the size of a dining-room table in the middle of the ground was not regarded by the players as likely to cramp their style.

The whole population sat round on the flat roofs of the houses, and the game was played to the accompaniment of a band of trumpets and kettle-drums.

The players were fairly well mounted, and not limited to four a side; apparently anyone could join in; at times the game was fast and furious, the player standing up in the stirrups and having a smash at the ball in the air, with both hands on the stick. It was not the polo I had been accustomed to play, but it was interesting to watch.

Next day a march of seventeen miles brought us through an arid district to the welcome orchards of Saspul, and here next day we left the Leh road and ascended the famous Saspul nullah in search of ibex.

The march up this nullah was one of great difficulty, there being no road, and the track lying over great masses of jagged rock; eventually, towards evening, we reached a valley and encamped by a stream. The cold at nights, especially when a wind got up, was considerable, but this was not to be wondered at as the camp was quite 15,000 feet above sea-level.

Next morning at 4 a.m. after a good breakfast I started off with my three *shikaries* on another climb of 3000 feet, which brought us to a high narrow plateau. The morning was wonderful, a cloudless sky of that transparent pale blue so characteristic of Tibet; the keen dry bracing air is so exhilarating one feels no exertion too great, but later in the day I suffered from a severe attack of mountain sickness.

The extensive view gives one a sense of freedom, and with no atmospheric effect it is difficult to form an estimate of distance, a range of mountains eighty miles off appears close at hand at the back of the tableland, and an ibex in the valley below enormous. The thin dry air has a magnifying effect, due to a kind of mirage.

The *shikaries*, who had gone ahead, returned and urged me to advance quickly to the head of a nullah as there were two fine ibex in the valley beyond the plateau, and they expected them to come up the nullah as the morning advanced. In this stimulating air, I foolishly ran and jumped from boulder to boulder, in spite of the increasing difficulty of breathing.

Arriving at the head of the nullah I could see two unusually fine heads far down in the valley below us.

But now all the symptoms of mountain sickness began

to manifest themselves — severe headache, a dull and confused mentality, nose-bleeding, and vomiting of blood with muscular weakness, and an overpowering desire to sleep, which becoming irresistible, I was obliged to lie down and fell fast asleep in the snow, the *shikaries*, meanwhile, watching the ibex.

After I had been sleeping for about three hours they woke me, as the ibex were on the move and evidently about to come up the nullah. Feeling somewhat better, I lay down on a ledge of rock commanding the head of the nullah and waited, but my muscular weakness was extreme, and getting worse; after a time I found it was impossible to lift my rifle to my shoulder, and when later in the afternoon the ibex came within easy range, I was quite incapable of firing a shot; imagine my feelings, after a march of 250 miles and another 250 miles back to civilization, to be within easy range of two magnificent heads and unable to fire!

A friend of mine, Captain Robinson, told me that during the War he drove two enemy planes to a great height and just when he had them at his mercy this muscular weakness overcame him, and he was unable to fire his machine gun.

Extraordinary incidents are recorded by the Air Force, of pilots and observers overcome by altitude. They frequently go to sleep, lose their memory and fly in the wrong direction or forget to go into action. An observer has been known to throw his important observation notes down into the enemy lines, or take endless photographs on the same plate. Until the condition was more fully understood it led to serious charges of cowardice and

errors of judgment, and trials by court martial were frequent.

The symptoms are entirely due to deficient oxygenation of the tissues from breathing an atmosphere in which the partial pressure of oxygen is greatly reduced, and is increasingly liable to occur at altitudes above 14,000 feet.

In this connection it is interesting to note the adaptability of the human organism to altered conditions. In this case it is shown by a rapid concentration of the blood, when a relative increase of the oxygen carrying haemoglobin occurs. A rise of as much as two per cent increase may occur within fifteen or twenty minutes, and this compensation for the lack of oxygen in the tissues is often associated with the improvement or disappearance of the symptoms.

Alas, the ibex passed, and we were then confronted with the problem, in my partial state of paralysis, of getting down to camp, which was clearly visible in the valley 3000 feet below; to attempt to remain on this exposed plateau without food and warm clothing during the night would have meant certain disaster.

Eventually we devised a plan, the *shikaries* having reconnoitred the ground ahead to see that there were no precipices. We all five lay on our backs, the three *shikaries*, the coolie and myself, in such a way that the shoulder of one was in the armpit of the next, with our arms across the shoulders of the man on the right and left. We then let ourselves go and slid down long stretches at a time. We eventually arrived at the river, with the camp just opposite on the far bank, but the difficulty was, how to get across? The river was a raging torrent, quite

impassable by wading, and also on account of the intense cold which would have frozen limbs to numbness. The only way was to jump from boulder to boulder, but how was I to do it with this partial paralysis? I was too heavy, and the jumps too long for my head *shikari* to attempt it with me on his back.

Night was closing in, a bitter wind swept down the valley, and to remain exposed in the open would have been to risk being frozen to death, so something desperate had to be done; after lying down for ten minutes and taking a liberal supply of brandy and hot bovril brought from the camp, I started to jump, preceded and followed from rock to rock by a *shikari*. I concentrated all my will power for the supreme effort and just succeeded in getting over, to collapse on the opposite side. Great is the power of will to help one out of the tightest corner. After this I was in bed for some days, and then returned to the Leh road at Saspul.

Leh, the capital of Ladak, is an important centre. During the summer months caravans arrive from every part of Central Asia, Siberia and Tibet, and from the south come traders from the markets of India and Srinagar.

A cosmopolitan crowd jostle one another in the bazaars. Turki caravan drivers, Chinese, Tibetans, savage Tartars in sheepskins, Hindu merchants, and fierce transborder Pathans, all intermingling, with a perfect babel of languages. Mixed with this throng are thousands of transport animals, ponies, yaks and camels; some of these caravans have a three or four months' trek before them, stumbling, straining, staggering over the broken, rocky and precipitous tracks that lead into the

remotest corners of Central Asia, bearing, for the most part, manufactured products of the West, principally cotton goods.

With the exception of missionaries, there are no permanent European residents in Leh. An assistant political officer goes up for three or four months during the summer from the Kashmere Residency at Srinagar.

Leh has the highest observatory in Asia, and is administered by the Kashmere Durbar.

Two marches from Leh up the Indus valley is the village of Himis, where one of the largest and most wealthy monasteries in Ladak is situated. Here every year, in the month of June on a date fixed by the Tibetan calendar, is held a species of Passion Play in the courtyard of the lamasery. For two days, the lamas, in gorgeously embroidered robes and Chinese silks, wearing large grotesque masks, chant and perform weird dances and strange symbolical rites.

The most important part of this festival is the Devil Dance. According to the Buddhist faith, the soul after death, on its journey to the next world, is beset on all sides by devils with terrifying bodies and faces; the object of these demons is to so frighten the soul that it will leave the right path, and should this unfortunately happen, it will rove about unknown regions indefinitely, idly trying to find its proper abode.

The Devil Dance is intended to avert this calamity, the lamas performing the dance being made up to represent the demons, and, by their antics and horrible howls, to familiarize the onlookers so that when they die their souls will not be so easily terrified by the spectres.

There are two interesting facts about this monastery. Although the most important in the country it has no *skooshok* living in the gompa; apparently there is an abbot, but when reincarnated in Lhasa four or five births back he decided not to return, and each re-birth taking place in Lhasa has found him determined not to leave the Holy City and return to his proper sphere.

The other fact is, that when Ladak was conquered by the Dogras about the year 1840, Himis Gompa alone of all the monasteries escaped being looted and its vast treasures are intact. The lamas are not, however, allowed to dispose of this wealth as they wish, the keys of the treasury being kept by the Naib Wazir, the highest official in Ladak, and representative of the Maharaja of Kashmere's Government.

This festival brings large numbers of nuns and lamas from Lhasa and all over Chinese Tibet, and the yellow robes of this country are seen intermingling with the red robes of their sister nuns and brothers of Ladak. The country people look upon it as a holiday and journey to Himis from far and near.

CHAPTER XV

LOOKING BACKWARD

Now I am in Naples, looking back on my life in India with feelings of pleasure and satisfaction. It has been a privilege to have been associated for so many years with the fine type of men who make up all the Indian services, the civil service, army, police, forest and engineering; men who largely owe their sterling qualities to the fact that they have had so often to stand alone and take big responsibilities. Not to be forgotten is the part 'Tommy Atkins' has fulfilled in India. What I have seen him endure — with perhaps many oaths yet always with a cheery face — defies description. Tortured by suffocating heat and biting insects, decimated by typhoid and cholera, malaria and dysentery, cut off from all the amenities of life at home, these men have lived in a foreign land, not for conquest but for peace, to prevent strife and bloodshed between ever-rival factions of a people who are, unfortunately, as far apart from national unity as the north pole is from the south.

No cenotaph stands to the memory of these soldiers of ours, no commission guards their thousands upon thousands of graves, yet no body of men have accomplished more in the cause of humanity.

As to the Indian people, those of us who have spent the best years of our lives in the country, cannot think of them without sincere affection. We recall the countless

acts of kindness, loyalty, and devotion performed by our Indian associates, by our servants, by the folk of the countryside. The plain man with a knowledge of India is lost in wonder that politicians appear completely to overlook the need and interests of the dumb three hundred millions, while listening to the self-interested claptrap of the small minority of some two millions who alone are politically-minded.

Thinking over my career generally in India (apart from the performance of close on twenty thousand operations) I have the satisfaction of feeling that good administrative work was done in the improvement of hospitals and jails, in the advancement of medical education, and in battling with the scourges of famine, plague and cholera. The word cholera, by the way, connects thoughts of India with thoughts of Naples. Readers who are familiar with that fascinating book, *The Story of San Michele*, will remember Dr. Munthe's allusions to the scourge of cholera. Dr. Munthe does not exaggerate. Happily cholera in Naples is a thing of the past, as the city's polluted wells have now been replaced by a wonderful water-supply, coming over thirty miles from the Apennines.

One cannot shut one's eyes, of course, to the fact that there are disadvantages to an Indian career. Perhaps one of the most trying is the all too frequent experience of enforced separation from one's wife and children, especially from one's children, as upbringing and education in India is impossible, quite apart from the question of climate.

When I was invalided home with malaria in 1909, the result of my work in the famine, my wife and I had not

seen our children for seven years. The P. & O. boat arrived at Plymouth earlier than expected, so that we reached Exeter, where my mother was living with our two girls, sooner than had been anticipated. As we drove up the Heavitree hill, my wife noticed two girls and a nurse walking down; jokingly she said, 'I wonder if those are our children?' and I replied, 'Impossible, they are much too big.' Arriving at my mother's house, we found the children were out, but half an hour later they returned — the two children we had passed on the road. They did not know us, we did not know them.

As I look at my tiger skins and other trophies on the walls and floors of my quarters in the Castello Aselmayer, my thoughts turn to sport. The spell of the jungle returns with all its old fascination. I see again its vastness, the beauty of the trees and foliage. Then the daydream vanishes and it is difficult to realize that Italy's hilly tracts of scrub and forest contain practically no wild life, and that even the song of birds is hushed.

The view from my windows presents another point of contrast. I look out on the whole panorama of the wonderful Bay of Naples stretched before me, with the island of Capri nineteen miles away — Capri the enchanting and ever-changing. At one moment the outline of its peaks is shrouded in the bluest haze, at the next there is a play of light and shade floating across its mountainsides. Then suddenly it stands out in bold relief, every detail reflected in the sapphire mirror which surrounds it. Such a vivid scene of mountains cannot but recall the vaster ranges of the Himalayas and my fancy carries me again to one of the lofty heights on which I have so often

stood, looking down on a vast ocean of white billowy clouds, stretching far away for mile upon mile to the rocky limit of the higher ranges.

Dr. Johnson, that master of common sense, said of life, that it was to be endured or enjoyed. I can honestly say that mine has been more enjoyment than endurance, and as the setting sun sends those wonderful hues flitting across Capri, I cannot help wishing that when it rises on the morrow it would bring me back youth, so that I might live it over again.